



## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

#### 46 CFR Parts 121, 160, 169, 184, and 199

[Docket No. USCG-2020-0107]

RIN 1625-AC51

#### Survival Craft Equipment – Update to Type Approval Requirements

**AGENCY:** Coast Guard, Department of Homeland Security (DHS).

**ACTION:** Final rule.

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**SUMMARY:** The Coast Guard is updating the type approval requirements for certain types of equipment that survival craft are required to carry on U.S.-flagged vessels. This rule will remove Coast Guard type approval requirements for nine of these types of survival craft equipment and replace them with the requirement that the manufacturer self-certify that the equipment complies with a consensus standard.

**DATES:** This final rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The incorporation by reference of certain publications listed in the rule is approved by the Director of the **Federal Register** on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION ]. The incorporation by reference of certain other publications listed in the rule were approved by the Director of the **Federal Register** on October 1, 1996.

**ADDRESSES:** To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG-2020-0107 in the search box and click “Search.” Next, in the Document Type column, select “Supporting & Related Material.”

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### **I. Abbreviations**

ASTM	ASTM, International
BLS	U.S. Bureau of Labor Statistics
CFR	Code of Federal Regulations
CG-ENG-4	Office of Design and Engineering Standards, Lifesaving & Fire Safety Division
CGMIX	U.S. Coast Guard Maritime Information Exchange
COA	Certificate of approval
DHS	Department of Homeland Security
ECEC	Employer Costs for Employee Compensation
FDA	U.S. Food and Drug Administration
FR	<b>Federal Register</b>
IBA	Inflatable buoyant apparatus
IBC Code	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
IGC Code	Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
ICR	Information collection request
IMO	International Maritime Organization
ISO	International Organization for Standardization
LSA Code	Life-Saving Appliances Code
MISLE	Marine Information for Safety and Law Enforcement

NAICS	North American Industry Classification System
NPRM	Notice of proposed rulemaking
OES	U.S. Bureau of Labor Statistics Occupational Employment Statistics
OMB	Office of Management and Budget
OPM	Office of Personnel Management
OTC	Over-the-counter
RA	Regulatory analysis
SOLAS	International Convention for the Safety of Life at Sea
§	Section
U.S.C.	United States Code

## **II. Basis, Purpose, and Regulatory History**

The legal authority for this rule is found in Title 46 of the United States Code (U.S.C.) Sections 2103, 3103, 3306, 3703, 4102, 4302, 4502, 7101, and 8101. The Secretary of the Department of Homeland Security (DHS) has delegated these statutory authorities to the Coast Guard pursuant to 14 U.S.C. 502 through DHS Delegation No. 00170.1, Revision No. 01.2, paragraph (II)(92)(a), (b), (e), and (f). Additionally, 14 U.S.C. 102(3) grants the Coast Guard broad authority to promulgate and enforce regulations for the promotion of safety of life and property on waters subject to the jurisdiction of the United States.

The purpose of this rule is to update the type approval requirements for 12 types of survival craft equipment that survival craft are required to carry on certain, specified U.S.-flagged vessels—bilge pumps, compasses, fire extinguishers, first-aid kits, fishing kits, hatchets, jackknives, knives, signaling mirrors, provisions (food rations), emergency drinking water, and sea anchors—as well as some of the survival craft equipment required for sailing school vessels. For nine of these types of equipment, this rule will replace the Coast Guard type approval requirement with a requirement that the manufacturer self-certify that the equipment complies with a consensus standard: bilge pumps, compasses, first-aid kits, fishing kits, hatchets, jackknives, mirrors, sea anchors, and water. Type approval is the primary process for equipment and materials to receive Coast Guard approval. Updating type approval requirements for survival craft equipment

will result in cost savings to equipment manufacturers, vessel owners and operators, and the Coast Guard.

The Coast Guard issued a notice of proposed rulemaking (NPRM) on October 5, 2020, and solicited public comment on the proposal during a comment period of 60 days.<sup>1</sup> The comment period closed on December 4, 2020. The Coast Guard received 13 comment submissions, which are discussed later in this document.

### **III. Background**

Many of the current requirements for survival craft equipment were developed in the 1950s and 1960s and have not been significantly updated since they were published. After thorough review of these requirements, as well as Coast Guard enforcement procedures, current maritime industry practice, and the availability of new consensus standards, we believe that the additional scrutiny provided by Coast Guard type approval does not increase the safety of the following nine types of survival craft equipment: bilge pumps, compasses, first-aid kits,<sup>2</sup> fishing kits, hatchets, knives (including jackknives), mirrors, sea anchors, and emergency drinking water.

For these types of equipment, the current Coast Guard type approval requirements are outdated and overly prescriptive. This places a burden on the equipment manufacturers, which, in turn, affects the design costs of complying with the outdated standard, the administrative overhead costs, and the time-to-market costs of manufacturing and selling equipment. The requirements also place a financial burden on the vessel owners and operators who are required to carry this specific approved equipment on board their survival craft. This equipment is frequently more costly and more difficult to obtain than similar products that are not type-approved. Finally, the

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<sup>1</sup> 85 FR 62842.

<sup>2</sup> Different first-aid kits are required for different survival craft, and this is explained in section IV of this rule under *First-Aid Kits*.

requirements place a burden on the Coast Guard to review and approve this equipment without commensurate increases in safety.

#### **IV. Discussion of Comments**

The Coast Guard received 13 comment submissions in response to the NPRM. Of those 13 comments, 1 was a duplicate and 1 was unrelated to the rulemaking. The remaining 11 comments were from maritime organizations, private companies, and individuals. Four comments we classified as general comments, two comments concerned technical standards, and five comments concerned first-aid kits. Below, we discuss each comment and our responses.

##### **General**

The Coast Guard received four comments on the NPRM that we categorized as general comments. One comment supported the proposed regulatory changes for approval requirements for first-aid kits. The Coast Guard acknowledges this comment.

Two commenters expressed concerns that removing type approval requirements could decrease the quality of survival craft equipment. We disagree. Even without a type approval requirement, the following checks will remain in place. For emergency drinking water in survival craft and rescue boats, the water quality will be verified by the local municipality or by an independent laboratory accepted by the Coast Guard, as required by 46 CFR 199.175(b)(40). Coast Guard-approved liferaft servicing facilities inspect survival equipment packed in inflatable liferafts prior to packing. Coast Guard marine inspectors also regularly check equipment not packed in inflatable liferafts, such as that in a lifeboat or rescue boat, or the first-aid kits carried on small passenger vessels, when conducting the required inspections on board commercial vessels.

Additionally, one commenter, a manufacturer of the approved Coast Guard items, expressed multiple concerns regarding this rule and the Coast Guard's regulatory analysis on its estimate of the impacts in the NPRM. This commenter said that removing type

approval requirements will cause the market to be flooded with substandard products, leading to revenue losses to the company. The commenter also said that the liferaft and lifeboat industry has consolidated and there is little competition, and, therefore, will not pass savings on to consumers.

For the reasons explained in our response to the two commenters above, we do not expect reduced quality in the equipment that is no longer required to be type-approved. We therefore do not expect a flood of products of reduced quality that drive down prices. With this final rule, prescriptive requirements will be replaced by consensus standards. Conforming to these international consensus standards will maintain the same level of safety without imposing unnecessary burdens on the public and provide alternatives for compliance. These compliance alternatives should result in cost savings to the directly impacted entities, which are manufacturers and vessel owners and operators. The Coast Guard does not have adequate industry information or data to estimate secondary impacts and indicate whether these savings will be passed on to the final consumers or end users of services provided by vessel owners and operators.

The commenter also suggested that some could incur additional testing costs as a result of this rule. Based on a review of the new and existing standards, the Coast Guard has not found that manufacturing firms will have new testing requirements under the International Organization for Standardization (ISO) standards.

The commenter suggested that, as an alternative to the removal of type approval requirements, the manufacturer could cover the cost of the certificate of approval (COA). Requiring manufacturers to cover the cost of the COA would result in additional costs to manufacturers without any attendant safety benefits.

Finally, the commenter asserted that our per-device savings estimates are too high and not the going rates in the industry. In preparing our economic analysis, we relied primarily on websites listing the retail prices of different products that were sold under

ISO standards instead of Coast Guard standards. We believe that the reason our prices appear to be high to the commenter is because our analysis was based on retail prices rather than wholesale prices, or the prices that manufacturers use to sell their products to businesses. Using retail prices is a common approach across Coast Guard rulemaking, because we do not have access to consistent wholesale price data across the industry.

### **F1003 and F1014 Standards**

The Coast Guard received two comments recommending incorporation of ASTM F1003 (2019), “Standard Specification for Searchlights on Motor Lifeboats,” and ASTM F1014 (2020), “Standard Specification for Flashlights on Vessels.” These 2019 and 2020 standards are more recent editions of the ASTM standards we proposed to adopt.

However, these standards were updated after the NPRM was developed, and so we were unable to include them in our proposed rule. The more recent standards contain significant differences as compared to the prior editions (the ones we incorporate in this rule), such that more evaluation is necessary. We will consider incorporating these standards in a future rulemaking.

### **First-Aid Kits**

The Coast Guard received five comments concerning the proposed changes to first-aid kits. The comments discussed contents of the first-aid kits, as well as technical standards that apply to first-aid kits.

Two commenters supported the proposed use of commercially available first-aid kits, to remove the burden of assembling very specific kit components.

Three commenters called for specified first-aid kit components, rather than leaving the exact number and size of items up to manufacturers so long as the kit meets ISO 18813:2006. These commenters said the kit contents should be standardized, and expressed concern that manufacturers would not provide adequate kits. One commenter also said that ISO 18813:2006 is not a widely accepted standard and may soon be

revised; that commenter suggested the Coast Guard should develop its own standard instead. Another commenter supported the use of the ISO standard. We believe that the contents described in ISO 18813:2006 are sufficient to meet the needs of basic first-aid kits required by mariners in a survival situation. The ISO standard specifies design, performance, and use of various items of survival equipment carried in survival craft and rescue boats complying with the International Convention for the Safety of Life at Sea (SOLAS), 1974 (as amended), and the International Maritime Organization (IMO) Life-Saving Appliance Code (LSA Code). The 2006 edition is the most current version of this standard that is available at this time.

During periodic shipboard inspections by both Coast Guard-licensed mariners and Coast Guard marine inspectors, first-aid kits not packed in inflatable liferafts are examined to ensure that they contain all the items listed in the provided instructions, that each unit carton is in an intact waterproof package, and that they meet the applicable regulatory requirements. First-aid kits packed in inflatable liferafts are inspected by Coast Guard-approved liferaft servicing facilities, also to ensure that they contain all the required items.

One commenter specifically called for a particular Coast Guard-approved watertight soft plastic pouch to contain the first-aid kit, because rigid plastic containers can become brittle and because that pouch is proven to meet the applicable durability requirements. ISO 18813:2006 discourages the use of rigid plastic cases that can shatter. If the case shatters, an entirely new kit must be purchased because it is in a not-as-approved condition, and Coast Guard inspectors would give the vessel a deficiency for not having an approved and in-working-condition piece of equipment. This would increase costs to the vessel.

One commenter noted that the U.S. Food and Drug Administration (FDA) does not routinely approve over-the-counter (OTC) products; it only reviews active



ingredients. Another comment inquired about the FDA regulatory status, product form, or type of delivery for two topical preparations in the ISO 18813 requirements.

It is up to the first-aid kit manufacturer to determine in what form the medicinal products are to be provided to meet the intended needs of the first-aid kit. However, medicinal products must meet the applicable OTC drug requirements outlined in title 21 of the Code of Federal Regulations (CFR) part 330, which contains FDA's applicable OTC requirements. In response to these comments, in this rule we revised the regulatory text of § 199.175(b)(10)(ii) to reference 21 CFR part 330.

One commenter asked that the Coast Guard remove the requirement for specific items with an expiration date (such as aspirin) and allow for equivalent alternatives. The commenter said that getting supplies delivered to remote locations can be challenging. The expiration date of OTC medications is typically between one and five years after manufacture. The commenter did not specify an alternative item without an expiration date, but the Coast Guard believes that a year or more is a reasonable period to plan for replacing first-aid supplies. In general, the Coast Guard believes that expiration dates are acceptable and can help ensure that the first-aid kit is reviewed and refreshed at intervals. The Food and Drug Administration requires OTC medications have expiration dates (see 21 CFR 211.137 and 211.166).

The same commenter recommended that vessel operators be allowed to exclude analgesics (pain relief medication) from first-aid kits. This commenter said that companies often prohibit their vessel crew members from giving out analgesic medication because of possible adverse side effects or interactions with other medication. In support of this recommendation, the commenter said that most passenger vessels operate near shore with easy access to shoreside medical services.

While access to shoreside medical resources may be available in certain areas of operation, these should not be relied on to provide the required first-aid supplies.

Shoreside medical resources will not be readily available to someone with an injury or emergency on the vessel. The first-aid kit for survival craft is intended to be used in an emergency away from shore.

Licensed mariners operating vessels in commercial service are required to have basic first-aid training. Any application of first aid should be given at the discretion of the licensed mariner and not at a level beyond the training or capability of the mariner administering the first aid. Analgesics are common OTC medications that do not require medical supervision, and the decision to take them is up to the person who requests them. Accordingly, the Coast Guard has decided to retain the requirement for analgesics in first-aid kits.

## **V. Discussion of Final Rule and Changes from NPRM**

This final rule amends several approval and carriage requirements in title 46 CFR. Specifically, this final rule updates the requirements in part 199, subchapter W, related to the equipment on survival craft and rescue boats on inspected vessels by replacing the requirement to carry Coast Guard-approved equipment with self-certification to voluntary consensus standards for certain equipment. This rule also makes conforming changes to part 169, subchapter R, for sailing school vessels that are not covered by subchapter W. In addition, this final rule revises part 160, subchapter Q, to remove approval standards for the survival craft equipment that is no longer required to be approved by the Coast Guard, and it updates the requirements for approval of emergency provisions to replace prescriptive Coast Guard requirements with consensus standards. A new subpart 160.046, Emergency Provisions, is added, to consolidate the applicable standards. Finally, this rule removes the requirement in part 121, subchapter K, and part 184, subchapter T, that first-aid kits carried on small passenger vessels must be approved by the Coast Guard, and updates those requirements to consensus standards to align with the revised approval requirements.

This final rule includes incorporation by reference of several voluntary consensus standards consistent with the National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113 (codified as a note to 15 U.S.C. 272). Three of the consensus standards this rule incorporates are international standards: ISO 18813:2006, “Ships and marine technology – Survival equipment for survival craft and rescue boats” (referred to as ISO 18813); ISO 17339:2018, “Ships and marine technology – Sea anchors for survival craft and rescue boats” (referred to as ISO 17339); and ISO 25862:2009, “Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices” (referred to as ISO 25862).

While the IMO does specify some standards for survival craft equipment affected by this rule, it does not stipulate that the affected survival craft equipment be approved by the Administration. In some cases (such as first-aid kits and drinking water), the LSA Code references ISO 18813 as an acceptable standard for the equipment to meet, whereas in others (such as fishing tackle), the LSA Code merely requires that the equipment be carried aboard the specified survival craft.

A more detailed explanation of the amendments to the aforementioned sections can be found in the NPRM. A number of non-substantive changes from the NPRM are made with this final rule to correct typographical, grammar, and format errors or issues, as well as for clarification purposes.

Lastly, as a result of public comment, this final rule requires that medicinal products meet the applicable OTC drug requirements as outlined in 21 CFR part 330. This administrative change is simply updating an improper reference.

## **VI. Incorporation by Reference**

Material incorporated by reference is currently listed in 46 CFR 199.05 and is added to the new § 160.046-3. Under 5 U.S.C. 552(a) and 1 CFR part 51, a publication is eligible for incorporation by reference if it meets Office of the Federal Register policies

and is reasonably available to and usable by the class of persons affected. Regulations in part 51 require that agencies discuss, in the final rule, ways that the materials the agency incorporates by reference are reasonably available, to interested parties and how interested parties can obtain the materials. In addition, the preamble to the final rule must summarize the material.

In accordance with the OFR's requirements, section VII.L. of this final rule summarizes the standards that the Coast Guard incorporates by reference in §§ 160.046-3 and 199.05. Interested persons have access to this material through their normal course of business, may purchase it from the organization, or may view a copy at Coast Guard Headquarters.

## **VII. Regulatory Analyses**

We developed this rule after considering numerous statutes and Executive orders related to rulemaking. Below, we summarize our analyses based on these statutes or Executive orders.

### *A. Regulatory Planning and Review*

Executive Orders 12866 (Regulatory Planning and Review) and 13563 (Improving Regulation and Regulatory Review) direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

The Office of Management and Budget (OMB) has not designated this rule a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, OMB has not reviewed it. A regulatory analysis (RA) follows.

The Coast Guard received several public comments on the NPRM, as discussed in section IV. of the preamble to this final rule. In response to a comment, in this final rule we are making an editorial change to 46 CFR 199.175(b)(10) that has no cost impact. See table 1.

Additionally, we are replacing prescriptive requirements with international standards that provide alternatives for compliance, which should result in cost savings to impacted entities. We also made some changes to the regulatory analysis, including updating the population of affected entities, and the wage rate using 2020 estimates, and removing the renewal instruction, because it is not applicable to this rule.

<b>Table 1: Changes from NPRM to Final Rule</b>			
<b>Section</b>	<b>Description of Change</b>	<b>Explanation</b>	<b>Cost Impact of Change</b>
§ 199.175(b)(10)	Editorial change that corrects a reference.	Update the language to correctly discuss the FDA's drug approval process.	No impact because it is updating an improper reference.

With this final rule, the Coast Guard removes the requirement for nine types of survival craft equipment to be approved by the Coast Guard from 46 CFR part 160 in subchapter Q (Equipment, Construction, and Materials: Specifications and Approval) and from § 199.175 (Survival Craft and Rescue Boat Equipment). The requirement for approvals on these nine types of equipment (bilge pumps, compasses, first-aid kits, fishing kits, hatchets, jackknives, mirrors, sea anchors, and water) will be replaced by a self-certification requirement, in order to comply with the LSA Code. For those types of equipment that still require a COA, we do not estimate any changes in costs or cost savings.<sup>3</sup> Finally, this rule updates the survival craft requirements for sailing school

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<sup>3</sup> Knives are not required to be Coast Guard-approved; however, they must meet the requirements in Section 4.1.5.1.2 of the LSA Code. This is an administrative change that will lead to no cost or cost savings.

vessels found in §§ 169.525 through 169.529, eliminating the unique requirements for survival craft equipment on these vessels.

Table 2 provides a summary of the affected population, costs, cost savings, and benefits of this rule. The affected population includes the manufacturers of survival craft equipment and the vessels equipped with survival craft. We estimate the cost savings to manufacturers by reducing reporting, recordkeeping, and production requirements of this survival craft equipment. We estimate the cost savings to vessel owners and operators by the price reductions in survival craft equipment, and we estimate the cost savings for the Government for reducing the review necessary for certain equipment. We estimate an annualized cost savings to industry of \$303,805 (with a 7-percent discount rate) and an annualized cost savings to the Government of \$10,087, for a total annualized cost savings of \$313,892.<sup>4</sup>

<b>Table 2: Summary of the Affected Population, Costs, Cost Savings, and Benefits</b>	
<b>Category</b>	<b>Summary</b>
Applicability	Revises the approval requirements specific to nine types of survival craft equipment by removing the Coast Guard type approval requirements and, instead, adopting a voluntary consensus standard, ISO 18813, “Ships and marine technology – Survival equipment for survival craft and rescue boats.” Also retains requirements for Coast Guard approval of emergency provisions, but revises the requirements to refer to ISO 18813 instead of prescriptive Coast Guard regulations.
Affected Population	Includes 16 manufacturers of 28 unique Coast Guard-approved products for 9 types of equipment;
	14,747 existing U.S.-flagged vessels with 31,729 survival craft; and
	113 new U.S.-flagged vessels annually with 449 survival craft.
Costs	There will be no costs to industry or the Federal Government as this rule will reduce the burden(s).
Benefits	There are non-monetary benefits to owners and operators of vessels with survival craft in having a larger selection of equipment to choose from, allowing for potential operational flexibility.
Industry Cost Savings*	Annualized: -\$303,805
	10-Year: -\$2.13 million
<del>Government Cost Savings</del>	Annualized: -\$10,087

<sup>4</sup> This analysis assumes the implementation year for this rule will be 2021.

	10-Year: -\$70,847
Total Cost Savings	Annualized: -\$313,892
	10-Year: -\$2.20 million
* The Industry Cost Savings, Government Cost Savings, and Total Cost Savings are all discounted at 7 percent.	

### **Affected Population**

This rule impacts three separate affected populations. First, this rule impacts manufacturers of Coast Guard-approved equipment because it changes the standards and approval process for nine types of survival craft equipment. Second, this rule impacts any new and existing U.S.-flagged vessels that carry survival craft because it will reduce the cost of buying and replacing survival craft equipment. Third, this rule impacts small passenger vessels inspected under subchapter K or T. They are required to maintain a separate first-aid kit stowed on board, and this rule reduces the cost of replacing first-aid kits. This rule also removes Table 169.527 from part 169 and removes the requirements for equipment outlined in § 169.529(a) through (mm) to conform to the changes made in 46 CFR part 199.

Data on manufacturers comes from the U.S. Coast Guard Maritime Information Exchange (CGMIX),<sup>5</sup> which is a public-facing version of the Marine Information for Safety and Law Enforcement (MISLE) database, unless otherwise specified. For each subchapter of inspected vessels that are required to carry survival craft, we used the MISLE database to estimate the number of vessels that will be affected by this rule.

#### ***Manufacturers of Coast Guard Approved Equipment***

The Coast Guard is eliminating approval requirements for nine types of survival craft equipment, discussed in detail in section V of this rule. These nine types of equipment include: (1) bilge pumps, (2) compasses, (3) first-aid kits for lifeboats and for liferafts, (4) fishing kits, (5) hatchets, (6) jackknives, (7) signaling mirrors, (8) sea anchors, and (9) emergency drinking water. For these 9 types of survival equipment,

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<sup>5</sup> <https://cgmix.uscg.mil/>.

there are 28 unique Coast Guard type-approved products.<sup>6</sup> This rule impacts manufacturers of products currently on the market as well as newly approved products. Currently approved products in use on survival craft will remain acceptable for the purpose of carriage after this rule’s implementation.

The 2019 information collection request (ICR) “Supporting Statement for Title 46 CFR Subchapter Q: Lifesaving, Electrical, Engineering and Navigation Equipment, Construction and Materials & Marine Sanitation Devices (33 CFR part 159)” (OMB Control Number: 1625-0035) estimates that companies will seek Coast Guard approval for 3 percent of the number of survival craft equipment product types on the market each year. The Coast Guard estimates that each new product approval replaces a preexisting product approval, such that the total number of approved products will not change each year, as the number of newly approved products has historically been small.

Table 3 presents the annual average of new products each year for the nine types of survival craft equipment. To calculate the annual average of new products, we multiplied the values in the “Number of Approved Products” column (a), which contains the number of existing approved products for each type of survival craft equipment, by 3 percent, from the “Percentage of New Approvals Each Year” column, (b).

<b>Table 3: Number of Products Currently Approved by the Coast Guard</b>				
<b>Equipment</b>	<b>Approval Series</b>	<b>Number of Approved Products* (a)</b>	<b>Percentage of New Approvals Each Year** (b)</b>	<b>Annual Average Number of New Products Each Year (c) = (a) × (b)</b>
Bilge pump	160.044	3	3%	0.09
Compass	160.014	3	3%	0.09
First-aid kit for Lifeboats	160.041	5	3%	0.15
First-aid kit for Liferafts	160.054	5	3%	0.15
Fishing kit	160.061	1	3%	0.03
Hatchet	160.013	1	3%	0.03
Jackknife	160.043	1	3%	0.03
Mirror, Signalling	160.020	2	3%	0.06
Sea anchor	160.019	1	3%	0.03

<sup>6</sup> Type Approval is the primary process for equipment and materials to receive Coast Guard approval. The certificate is valid for 5 years, and the approval is listed on the CGMIX.



Water	160.026	6	3%	0.18
<b>Total</b>		<b>28</b>	<b>-</b>	<b>1</b>
<b>Sources:</b> *CGMIX data pull, March 2021. ***“Supporting Statement for Title 46 CFR Subchapter Q: Lifesaving, Electrical, Engineering and Navigation Equipment, Construction and Materials & Marine Sanitation Devices (33 CFR 159)” (OMB Control Number: 1625-0035). <b>Note:</b> Values may not sum due to rounding.				

### ***U.S.-flagged Vessels that Carry Coast Guard-Approved Equipment***

This rule impacts a total of 14,747 existing vessels. These vessels, which are categorized by subchapter, are required to carry survival craft in accordance with the applicable regulations. Of these vessels, we estimate the total amount of survival craft maintained by the affected population to be 31,729. Table 4 shows the breakdown of the survival craft across the existing vessel population as follows: 2,612 inflatable buoyant apparatuses (IBAs), 23,748 liferafts, 2,835 lifeboats, and 2,534 rescue boats.

<b>Table 4: Vessel and Survival Craft Population</b>							
<b>Subchapter</b>	<b>Type of Vessel</b>	<b>Total Number of Vessels (a)</b>	<b>IBAs</b>	<b>Inflatable Liferafts</b>	<b>Lifeboats</b>	<b>Rescue Boats</b>	<b>All Survival Craft</b>
			<b>Total (b)</b>	<b>Total (c)</b>	<b>Total (d)</b>	<b>Total (e)</b>	<b>Total (f)</b>
C	Commercial Fishing Vessels	6022	248	6267	141	52	6708
C	Uninspected Passenger Vessels	173	10	258	2	7	277
D	Tank	323	3	706	543	49	1301
H	Passenger	191	640	444	91	286	1461
I	Cargo	1037	3	3247	1200	618	5068
I-A	Mobile Offshore Drilling Units	57	0	263	623	37	923
K	Small Passenger	311	512	950	2	164	1628
L	Offshore Supply Vessels	338	0	1393	55	322	1770
M	Towing Vessels	1434	91	1485	2	51	1629
R	Nautical Schools	29	2	140	79	22	243
R	Sailing Schools	10	0	24	1	7	32

T	Small Passenger	4231	1025	7506	5	830	9,366
U	Oceanographic Research	74	3	260	53	36	352
Other Vessels		517	75	805	38	53	971
<b>Total</b>		<b>14,747</b>	<b>2,612</b>	<b>23,748</b>	<b>2,835</b>	<b>2,534</b>	<b>31,729</b>

Table 5 presents vessels by the subchapter to which they are inspected in 46 CFR. “Other vessels” includes public and recreational vessels not subject to inspection. The owners and operators of the 14,747 identified vessels will experience cost savings from the lower estimated cost of replacing equipment. We used this existing vessel population data from MISLE and multiplied it by the average number of IBAs, liferafts, lifeboats, and rescue boats per vessel, which we also retrieved from MISLE, to obtain our estimated survival craft population. The estimated survival craft population is the number of survival craft that will need to replace non-durable Coast Guard-approved equipment over the next 10 years. The replacement equipment will be less expensive, because the replacement equipment will not need Coast Guard approval. Those vessels with previously approved survival craft equipment will not be required to replace their survival craft equipment until the equipment expires or becomes unserviceable.

After establishing the existing number of current survival craft, we then estimated the growth in the number of survival craft each year in order to project our affected population for the next 10 years. To calculate the number of new survival craft each year, we multiplied the “Number of New Vessels per Year” by each “Average per Vessel” column to obtain our annual totals for each new survival craft type.<sup>7</sup> We estimate that 25 new IBAs, 222 new liferafts, 33 new lifeboats, and 31 new rescue boats will be outfitted with equipment subject to this rule each year.

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<sup>7</sup> We calculate the “Number of New Vessels per Year” column by taking the total number of new vessels by subchapter by year from the MISLE database, and the “Average per Vessel” column by dividing column (b) by column (a) in table 4.

We then sum the totals for each survival craft type across each affected subchapter to obtain our estimated population of new survival craft each year for this final rule. This annual growth in the survival craft population provides an estimate of the number of new survival craft that will enter the market each year. The vessel owners and operators of these craft will experience cost savings from buying some equipment, as discussed in this final rule, which will no longer need Coast Guard approval. Table 5 presents the estimated total number of new survival craft each year.

<b>Table 5: Average Survival Craft per Vessel</b>										
<b>Subchapter</b>	<b>Type of Vessel</b>	<b>New Vessels per Year</b>	<b>IBAs</b>		<b>Inflatable Liferafts</b>		<b>Lifeboats</b>		<b>Rescue Boats</b>	
			<i>Average per Vessel</i>	<i>Total</i>	<i>Average per Vessel</i>	<i>Total</i>	<i>Average per Vessel</i>	<i>Total</i>	<i>Average per Vessel</i>	<i>Total</i>
<b>C</b>	Commercial Fishing Vessels	19	0.04	1	1.04	20	0.02	0	0.01	0
<b>C</b>	Uninspected Passenger Vessels	1	0.06	0	1.49	1	0.01	0	0.04	0
<b>D</b>	Tank	5	0.01	0	2.19	11	1.68	8	0.15	1
<b>H</b>	Passenger	2	3.35	7	2.32	5	0.48	1	1.50	3
<b>I</b>	Cargo	9	0	0	3.13	28	1.16	10	0.60	5
<b>I-A</b>	Mobile Offshore Drilling Units	1	0	0	4.61	5	10.93	11	0.65	1
<b>K</b>	Small Passenger	5	1.65	8	3.05	15	0.01	0	0.53	3
<b>L</b>	Offshore Supply Vessels	11	0	0	4.12	45	0.16	2	0.95	10
<b>M</b>	Towing Vessels	22	0.06	1	1.04	23	0	0	0.04	1
<b>R</b>	Nautical Schools	0	0.07	0	4.83	0	2.72	0	0.76	0
<b>R</b>	Sailing Schools	0	0	0	2.40	0	0.10	0	0.70	0
<b>T</b>	Small Passenger	35	0.24	8	1.77	62	0	0	0.20	7
<b>U</b>	Oceanographic Research	1	0.04	0	3.51	4	0.72	1	0.49	0
<b>Other Vessels</b>	Other Vessels	2	0.15	0	1.56	3	0.07	0	0.10	0
<b>Total</b>		<b>113</b>	<b>6</b>	<b>25</b>	<b>37</b>	<b>222</b>	<b>18</b>	<b>33</b>	<b>7</b>	<b>31</b>
<b>Note:</b> Totals may not sum due to rounding.										

***Subchapters K and T Vessels***

This rule also affects all U.S.-flagged vessel operators regulated under subchapters K and T, as these vessel operators are required to maintain a Coast Guard-approved first-aid kit onboard their vessels, in addition to any first-aid kits carried in the survival craft. The owners and operators of these small passenger vessels will no longer be required to maintain Coast Guard-approved first-aid kits aboard the vessels themselves. Using MISLE data, we estimate there to be 5,982 existing small passenger vessels, with 40 new vessels being built on an annual basis. This number includes all small passenger vessels defined in subchapters K and T, found in §§ 121.710 and 184.710, respectively, regardless of what type of survival craft they have on board.

### ***Equipment Type for Each Survival Craft***

The type of equipment each survival craft is required to carry varies depending on the intended use of the survival craft. Generally, survival craft intended for longer (international) voyages require more equipment than those intended to be used closer to shore. Lifeboats on inspected vessels generally must carry an equipment pack for an international voyage.<sup>8</sup> Table 6 contains the equipment required by pack and type of survival craft.

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<sup>8</sup> With the exception of lifeboats on sailing school vessels, which must carry the equipment required in §§ 169.527 and 169.529.

**Table 6: Required Survival Craft Equipment Subject to the Final Rule for Lifeboats, Liferafts, Rescue Boats, and IBAs**

Equipment	Types of Equipment Required							
	Lifeboats		Liferafts			Rescue Boats		IBAs
	International Voyage	Short International Voyage**	International Voyage (SOLAS A pack)	Short International Voyage (SOLAS B pack)	Coastal Service pack	International Voyage	Short International Voyage***	
Bilge pump	1	1						
Can Opener*	3	3	3					
Compass	1	1				1	1	
Fire extinguisher	1	1				1	1	
First-aid kit	1	1	1	1		1	1	1
Fishing kit	1							
Hatchet	2	2						
Jackknife**	1	1						
Knife**			1	1	1	1	1	2
Mirror, Signaling	1	1	1	1	1			1
Sea anchor	1	1	2	2	1	1	1	1
Water (liters per person)	3	1.5	3					

**Sources:**

International Voyage: 46 CFR 199.175

IBAs: 46 CFR 160.010-3

Coastal Service pack: 46 CFR 160.051-9

**Notes:**

\* § 199.175(b)(5) allows jackknives to take the place of a can opener.

\*\* This rule removes the separate requirements for knives and jackknives and, instead, requires that all survival craft be equipped with either knives or jackknives.

\*\*\* According to § 70.10-1, a short international voyage is an international voyage in the course of which a vessel is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage may exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the vessel commences its return voyage to the country in which the voyage began.

### ***Equipment Pack Types for Commercial Fishing Vessels***

Commercial fishing vessels must be equipped with either a Coastal Service pack, a SOLAS A pack, or a SOLAS B pack, depending on vessel size, distance traveled, whether the ocean route is designated as a cold-water route or warm-water route, and the number of persons on board. Table 7 provides a brief description of the packs that can be carried by lifeboats and liferafts.<sup>9</sup>

<b>Table 7: Description of Packs carried by Lifeboats and Liferafts</b>	
<b>Type of Pack</b>	<b>Contents</b>
Coastal Service pack	A Coastal pack will contain a Sea Anchor (Automatically Deployed), Floating/Heavy Line (Length 100 feet), Rain Water Collector, Floatable Knife, Waterproof Equipment Bag, Raft Use Instructions, Individual Thermal Protective Aids (2 nos.), Floatable Paddles (1 pair), Manual Inflation/Bilge Pump, Repair Clamps (6 nos.), Adhesive and Patch Repair Kit.
SOLAS B pack	In addition to the items listed in the Coastal pack, a SOLAS B pack will contain: Waterproof Flashlight, a Spare Flashlight Bulb, Spare Flashlight “D” Cell Batteries (3 nos.), Sponges (2 nos.), Bailer, SOLAS Handheld Flares (3 nos.), SOLAS Rocket Parachute Flares (2 nos.) Buoyant Smoke Signal (1 no.), Seasick Bags (1 per person), Water Storage Bag, Thermal Protective Aid, Heliograph Mirror (for signaling), First-Aid Kit, Signaling Whistle, Anti-Seasickness Pills (6 Per Person), Spare Sea Anchor.
SOLAS A pack	In addition to the items listed in the Coastal pack and the items listed in SOLAS B, a SOLAS A pack will include: a Graduated Drinking Cup, Drinking Water (6 to 20 Person Capacity), Food Ration (10kj per Person), Can Opener, Fishing Kit, SOLAS Handheld Flares (Total 6 nos.) and a SOLAS Rocket Parachute Flare (Total 4 nos.).

### **Equipment Pack types for Survival Craft**

We used vessel route types from MISLE to estimate the percentage of vessels with a SOLAS A pack compared to a SOLAS B pack. We presume that all vessels with “Ocean” listed as a route type carry survival craft with SOLAS A packs. We estimate the remaining route types, not listed as “Ocean,” will have SOLAS B packs. Using commercial fishing vessel data from MISLE and knowledge from subject matter experts from the Coast Guard’s Lifesaving & Fire Safety Division (CG-ENG-4), who specialize in survival craft data, we estimate that 50 percent of non-oceangoing fishing vessels will

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<sup>9</sup> Readers can find more information on inflatable liferafts for domestic service at [https://ecfr.io/Title-46/sp46.6.160.160\\_1051](https://ecfr.io/Title-46/sp46.6.160.160_1051).

have Coastal Service packs and 50 percent of non-oceangoing fishing vessels will have SOLAS B packs.

We created a distribution of SOLAS A, SOLAS B, and Coastal Service packs by pulling all U.S.-flagged vessels by the inspection subchapter and then pulling these vessels by route type from the MISLE database. We excluded any vessels that did not have survival craft or had an unknown field for survival craft in the MISLE database. The route-type designation included “Ocean” for oceangoing vessels in MISLE, which we designated as SOLAS A vessels.<sup>10</sup> We designated the remainder as SOLAS B vessels, except for commercial fishing vessels.<sup>11</sup> We then calculated the number of SOLAS A packs by dividing the population of our vessels (by subchapter) by the sum of vessels that had “Ocean” routes and dividing that sum by the sum of vessels in that given subchapter. To calculate the percentage of SOLAS B packs, we simply subtracted the number of SOLAS A packs from 100 percent. This data pull provided the total number of inflatable liferafts and lifeboats, respectively, and the percentage of each survival craft pack type by subchapter, which is presented in table 8.

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<sup>10</sup> The “Ocean” designation in MISLE specifically refers to vessels with SOLAS certificates that designate them as SOLAS A vessels. The MISLE data being pulled is from 2008–2020.

<sup>11</sup> We broke out the Coastal routes and short international routes by vessel, because Commercial Fishing Vessels are the only type of vessels in our affected population that will carry Coastal Service packs instead of only having SOLAS B packs for short international shipping routes.

<b>Table 8: Percentage of Equipment Pack Types for Lifeboats and Liferafts by Subchapter</b>					
<b>Type of Vessel</b>	<b>Total Number of Vessels (a)</b>	<b>Number of Oceangoing Vessels (b)</b>	<b>Coastal Service pack (c)</b>	<b>Short International/ SOLAS B (d)</b>	<b>International / SOLAS A (e)</b>
<b>Commercial Fishing (Subchapter C)</b>	6,022	3387	22%	22%	56%
<b>Uninspected Passenger (Subchapter C)</b>	173	105	-	39%	61%
<b>Tank (Subchapter D)</b>	323	313	-	3%	97%
<b>Passenger (Subchapter H)</b>	191	67	-	65%	35%
<b>Cargo and Miscellaneous (Subchapter I)</b>	1037	974	-	6%	94%
<b>Mobile Offshore Drilling Units (Subchapter I-A)</b>	57	55	-	4%	96%
<b>Small Passenger (Subchapter K)</b>	311	6	-	98%	2%
<b>Offshore Supply (Subchapter L)</b>	338	335	-	1%	99%
<b>Towing (Subchapter M)</b>	1434	1123	-	22%	78%
<b>Nautical Schools (Subchapter R)</b>	29	28	-	3%	97%
<b>Sailing Schools (Subchapter R)</b>	10	2	-	80%	20%
<b>Small Passenger (Subchapter T)</b>	4231	872	-	79%	21%
<b>Oceanographic Research (Subchapter U)</b>	74	42	-	43%	57%
<b>Other</b>	517	300	-	42%	58%
<b>Note:</b> Totals may not sum due to rounding.					

We then estimated the number of liferafts and lifeboats by equipment pack type for existing and new vessels by looking at the total number of packs carried by lifeboats and liferafts. Table 9 presents the number of SOLAS A, SOLAS B, and Coastal Service packs by liferaft and lifeboat for each subchapter of vessels.



We calculated the total number of inflatable liferafts with Coastal Service Packs (column (a) in table 9) by multiplying the percentage of Coastal Service Packs in liferafts and lifeboats (column (c) in table 8) by the total number of inflatable liferafts by subchapter (column (c) in table 4). We calculated column (b) in table 9, “Short International/SOLAS B packs for inflatable liferafts,” by multiplying column (d) in table 8, which is the percentage of Short International/SOLAS B packs by vessel subchapter, by column (c) in table 4, which is the total number of inflatable liferafts by subchapter. We calculated column (c) in table 9, “International/SOLAS A packs for liferafts,” by multiplying column (e) in table 8, which is the percentage of International/SOLAS A packs by vessel subchapter, by column (c) in table 4, which is the total number of inflatable liferafts by subchapter. We calculated column (e) in table 9, “Short International/SOLAS B packs for lifeboats,” by taking the sum of multiplying columns (c) and (d), the percentages of Coastal packs and Short International/SOLAS B packs in table 8 by column (d) in table 4, which is the total number of lifeboats by subchapter. Finally, we calculated column (f) in table 9, “International/SOLAS A packs for lifeboats” by multiplying column (e) from table 8, which is the percentage of International Packs/SOLAS A, by column (d) in table 4, which is the total number of lifeboats by subchapter.

**Table 9: Vessel Lifeboat and Liferaft Count by Subchapter**

	Inflatable Liferafts				Lifeboats		
Type of Vessel	Coastal Service pack (a)	Short International / SOLAS B (b)	International / SOLAS A (c)	Total (a) + (b) + (c) = (d)	Short International / SOLAS B (e)	International/ SOLAS A (f)	Total (e) + (f) = (g)
<b>Commercial Fishing Vessels (Subchapter C)</b>	1,371	1,371	3,525	6,267	62	79	141
<b>Uninspected Passenger Vessels (Subchapter C)</b>	-	101	157	258	1	1	2
<b>Tank (Subchapter D)</b>	-	22	684	706	17	526	543
<b>Passenger (Subchapter H)</b>	-	288	156	444	59	32	91
<b>Cargo and Miscellaneous (Subchapter I)</b>	-	197	3,050	3,247	73	1,127	1,200
<b>Mobile Offshore Drilling Units (Subchapter I-A)</b>	-	9	254	263	22	601	623
<b>Small Passenger (Subchapter K)</b>	-	932	18	950	2	0	2
<b>Offshore Supply Vessels (Subchapter L)</b>	-	12	1,381	1,393	0	55	55
<b>Towing Vessels (Subchapter M)</b>	-	322	1,163	1,485	0	2	2
<b>Nautical Schools (Subchapter R)</b>	-	5	135	140	3	76	79
<b>Sailing Schools (Subchapter R)</b>	-	19	5	24	1	0	1
<b>Small Passenger (Subchapter T)</b>	-	5,959	1,547	7,506	4	1	5
<b>Oceanographic Research (Subchapter U)</b>	-	112	148	260	23	30	53
<b>Other Vessels</b>	-	338	467	805	16	22	38
<b>Total</b>	<b>1,371</b>	<b>9,687</b>	<b>12,690</b>	<b>23,748</b>	<b>283</b>	<b>2,552</b>	<b>2,835</b>

**Note:** Values may not sum due to rounding.

Table 10 presents the total number of new packs needed each year for new survival craft. We calculated this table by taking the number of new lifeboats and liferafts presented in table 5 and multiplying that figure by the distribution in table 8 to obtain the number of new packs needed for the new liferafts and lifeboats on vessels each year.

<b>Table 10: Lifeboats and Liferafts by Equipment Pack Type Needed on an Annual Basis Broken Out by Subchapter</b>							
	<b>Inflatable Liferafts</b>				<b>Lifeboats</b>		
<b>Type of Vessel</b>	<b>Coastal Service pack</b>	<b>Short International / SOLAS B</b>	<b>International/ SOLAS A</b>	<b>Total</b>	<b>Short International/ SOLAS B</b>	<b>International/ SOLAS A</b>	<b>Total</b>
<b>Commercial Fishing (Subchapter C)</b>	4	5	11	20	0	0	0
<b>Uninspected Passenger (Subchapter C)</b>	-	0	1	1	0	0	0
<b>Tank (Subchapter D)</b>	-	0	11	11	0	8	8
<b>Passenger (Subchapter H)</b>	-	3	2	5	1	0	1
<b>Cargo and Miscellaneous (Subchapter I)</b>	-	2	26	28	1	9	10
<b>Mobile Offshore Drilling Units (Subchapter I-A)</b>	-	0	5	5	0	11	11
<b>Small Passenger (Subchapter K)</b>	-	15	0	15	0	0	0
<b>Offshore Supply (Subchapter L)</b>	-	0	45	45	0	2	2
<b>Towing (Subchapter M)</b>	-	5	18	23	0	0	0
<b>Nautical Schools (Subchapter R)</b>	-	0	0	0	0	0	0
<b>Sailing Schools (Subchapter R)</b>	-	0	0	0	0	0	0
<b>Small Passenger (Subchapter T)</b>	-	49	13	62	0	0	0
<b>Oceanographic Research (Subchapter U)</b>	-	2	2	4	0	1	1

<b>Other Vessels</b>	-	1	2	3	0	0	0
<b>Total</b>	<b>4</b>	<b>82</b>	<b>136</b>	<b>222</b>	<b>2</b>	<b>31</b>	<b>33</b>
<b>Note:</b> Values may not sum due to rounding.							

### ***Benefits***

In addition to the nonquantified benefits discussed in table 2, this rule will generate a cost savings as follow:

### ***Cost Savings***

This rule will generate a cost savings to: (1) vessel owners and operators from having the option to purchase less expensive survival craft equipment; (2) equipment manufacturers from reducing reporting, recordkeeping, and production requirements of survival craft equipment; and (3) the Federal Government from reducing recordkeeping requirements. The details and calculations of the cost savings are discussed later in this final rule.

### ***Wages***

This rule will reduce the burden of review that is required by both industry and the Federal Government. This review includes preparing COA applications, renewals, and product instructions by certain manufacturers. We presume clerical employees will be responsible for all the manufacturer's recordkeeping activities, and production employees will be responsible for marking equipment and packing instructions. Federal Government employees who possess the technical knowledge to review submissions to ensure safety standards will be senior engineers at the GS-14 grade. These employees will be responsible for the review of all the submitted information.

We calculate the costs for each activity by estimating the labor hours required in each labor category and then multiplying those burdens by the wage rate for each labor category. For this analysis, we calculated private sector wages using 2020 wage data from the U.S. Bureau of Labor Statistics (BLS) Occupational Employment Statistics

(OES) for the miscellaneous manufacturing sector (North American Industry Classification System (NAICS) 339000).<sup>12</sup> We added a load factor to the industry wages using December 2020 wage and total compensation data from the BLS Employer Costs for Employee Compensation (ECEC) survey, which accounts for employee benefits. This load factor represents the total benefits as a percentage of total salary.<sup>13</sup> Table 11 summarizes the loaded wage rates for industry used in this RA.

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<sup>12</sup> [https://www.bls.gov/oes/2020/may/naics3\\_339000.htm](https://www.bls.gov/oes/2020/may/naics3_339000.htm).

<sup>13</sup> A loaded labor rate is what a company pays per hour to employ a person beyond the hourly wage. Instead, the loaded labor rate includes the cost of benefits (health insurance, vacation, etc.). We calculate the load factor for wages by dividing total compensation by wages and salaries. For this analysis, we used BLS' Employer Cost for Employee Compensation/Manufacturing Occupations, Private Industry report (Series IDs, CMU2013000000000D and CMU2023000000000D for all workers using the multi-screen data search). Using 2020 Quarter 4 Manufacturing data, we divided the total compensation amount of \$40.02 by the wage and salary amount of \$26.56 to get the load factor of 1.51 (\$40.02 divided by \$26.56). This data is found in table 4 of the *Employer Costs for Employee Compensation December 2020 News Release* available at Employer Costs for Employee Compensation Archived News Releases : U.S. Bureau of Labor Statistics (bls.gov).

**Table 11: Derivation of 2020 Loaded Industry Wage Rates (Rounded to the Nearest Dollar)**

Personnel Category	Data Source(s)	2020 Hourly Wage	Load Factor	Loaded Hourly Wage
		(a)	(b)	(c) = (a)×(b)
Technical	<p><b>Wage Rate:</b> Mean hourly wage for Industrial Engineers, including Health and Safety: Occupation code (17-2110) under the miscellaneous manufacturing sector (NAICS 339000) from the BLS OES. Link: <a href="https://www.bls.gov/oes/2020/may/naics3_339000.htm#17-0000">https://www.bls.gov/oes/2020/may/naics3_339000.htm#17-0000</a></p> <p><b>Loading Factor:</b> Calculated from December 2020 BLS ECEC non-seasonally adjusted data for wage and salaries (CMU2013000000000D) and total compensation (CMU2023000000000D) for private industry workers in the miscellaneous manufacturing sector.</p>	\$44.10	1.51	<b>\$67</b>
Clerical	<p><b>Wage Rate:</b> Mean hourly wage for Information and Record Clerks: Occupation code (43-4000) under the miscellaneous manufacturing sector (NAICS 339000) from the BLS OES. Link: <a href="https://www.bls.gov/oes/2020/may/naics3_339000.htm#43-4000">https://www.bls.gov/oes/2020/may/naics3_339000.htm#43-4000</a></p> <p><b>Loading Factor:</b> Calculated from December 2020 BLS ECEC non-seasonally adjusted data for wage and salaries (CMU2013000000000D) and total compensation (CMU2023000000000D) for private industry workers in the manufacturing sector.</p>	\$19.87	1.51	<b>\$30</b>
Production	<p><b>Wage Rate:</b> Mean hourly wage for Assemblers: Occupation code (51-2000) in the miscellaneous manufacturing sector (NAICS 339000) from the BLS OES. Link: <a href="https://www.bls.gov/oes/2020/may/naics3_339000.htm#51-2000">https://www.bls.gov/oes/2020/may/naics3_339000.htm#51-2000</a></p> <p><b>Loading Factor:</b> Calculated from December 2020 BLS ECEC non-seasonally adjusted data for wage and salaries (CMU2013000000000D) and total compensation (CMU2023000000000D) for private industry workers in the manufacturing sector.</p>	\$17.22	1.51	<b>\$26</b>
<b>Note:</b> Values may not sum due to rounding.				

For Federal Government employees, The Office of Personnel Management (OPM) lists the hourly pay for Federal employees according to the Washington, D.C. area General Schedule (GS) pay tables.<sup>14</sup> OPM records the hourly pay of GS-14, step 5 (the midpoint of the pay band) as \$65.88. We calculate the share of total compensation of Federal employees to account for a government employee's non-wage benefits. The Congressional Budget Office (2017) reports total compensation to Federal employees as \$64.80 per hour and wages as \$38.30.<sup>15</sup> We determine the load factor to be approximately 1.69.<sup>16</sup> We multiplied \$65.88 by 1.69 to obtain a loaded hourly wage rate of approximately \$111.34 for a GS-14 senior engineer.

### ***Cost Savings to Equipment Manufacturers***

We estimate that manufacturers of Coast Guard-approved equipment will have a cost savings associated with no longer having to complete applications to obtain and maintain Coast Guard approval. In addition, this rule will remove recordkeeping and reporting requirements, and reduce testing requirements for some pieces of survival equipment.

### ***Number of Survival Craft Products***

This rule modifies the approval requirements for nine categories of survival craft equipment. In total, there are 28 approvals for these 9 categories of survival craft equipment. These are the specific items that vessel owners and operators purchase to comply with the vessel carriage regulations found in 46 CFR chapter I, subchapters C, T, K, and W.<sup>17</sup> These items are required to be stowed on board survival craft.

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<sup>14</sup> [https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/20Tables/html/DCB\\_h.aspx](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/20Tables/html/DCB_h.aspx).

<sup>15</sup> Congressional Budget Office (2017), "Comparing the Compensation of Federal and Private-Sector Employees, 2011 to 2015," <https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52637-federalprivatepay.pdf>.

<sup>16</sup> \$64.80 divided by 38.30.

<sup>17</sup> Refer to the appendix titled "Appendix C: Carriage Requirements for all the Survival Craft Equipment" in the docket folder for more information on carriage requirements for all vessels affected by this final rule.

To comply with the lifesaving equipment regulations in 46 CFR chapter I, subchapter Q, manufacturers submit an application to the Coast Guard for review and approval. Once approved, the manufacturer of each piece of equipment must mark it (or stamp it) with its approval number (see table 12).

There are two types of survival craft equipment: (1) items that are durable and need not be replaced or serviced frequently, such as bilge pumps, compasses, fishing kits,<sup>18</sup> jackknives, signaling mirrors, hatchets, and sea anchors; and (2) items that are not durable, expire, and must be replaced, such as first-aid kits and emergency drinking water. We used the annual total number of pieces of survival craft equipment needed to stock new survival craft in order to forecast the number of new pieces of equipment manufactured and stamped on an annual basis. We estimate that, in the long term, the supply of new survival equipment will equal the demand of new survival craft equipment.

The Coast Guard does not have substantive data on how long these durable goods last, and we estimate that these goods will last as long as the survival craft themselves.

We discuss the renewal rate of non-durable goods, first-aid kits, and water later in this analysis.<sup>19</sup> Table 12 lists the estimated number of pieces of survival craft equipment manufactured on an annual basis.

<b>Table 12: Estimated Number of Pieces of Equipment Manufactured Annually</b>		
<b>Equipment</b>	<b>Approval Series</b>	<b>Annual Number of Pieces of Equipment</b>
Compass	160.014	87
First-aid kit for Lifeboats	160.041	188
First-aid kit for Liferafts	160.054	285
Fishing kit	160.061	38
Hatchet	160.013	92
Jackknife	160.043	46
Mirror, Signaling	160.020	338
<b>Total</b>		<b>1,074</b>

<sup>18</sup> There is currently one Coast Guard-approved fishing kit on CGMIX. The only non-durable aspect of the fishing kit is the bait, which is made of a synthetic resin known as plastisol. If stored properly, plastisol has an indefinite shelf life.

<sup>19</sup> Refer to the sections titled *First-Aid Kits*, *First-Aid Kits for Liferafts and IBA*, and *Emergency Water* further in the regulatory analysis.



## **Equipment Approval and Markings**

In the current regulations, manufacturers seeking Coast Guard approval must submit a COA application with information such as technical plans, drawings, specifications, instructional materials, and test reports. In addition to the initial application, manufacturers of Coast Guard-approved equipment must also submit application renewals every 5 years to maintain their approval status. Table 3 presents the estimated number of new COA applications for each equipment type, as the annual average number of new products each year.

Table 13 presents the estimated number of application renewals for each equipment type. Since the Coast Guard estimates that 1 of every 5 applications will be renewed on an annual basis, the number of renewal applications is equal to 20 percent of the total number of products. Once a product has been approved, the manufacturer must stamp each individual piece of survival craft equipment with the Coast Guard approval number and other information.

<b>Table 13: Total Number of New Renewals</b>				
<b>Equipment</b>	<b>Approval Series</b>	<b>Total Products</b>	<b>Annual Percentage of COAs for Renewals</b>	<b>Total Renewal Applications Annually</b>
		<b>(a)</b>	<b>(b)</b>	<b>(c) = (a)×(b)</b>
Bilge pump	160.044	3	20%	0.6
Compass	160.014	3	20%	0.6
First-aid kit for Lifeboats*	160.041	5	20%	1
First-aid kit for Liferrafts	160.054	5	20%	1
Fishing kit	160.061	1	20%	0.2
Hatchet	160.013	1	20%	0.2
Jackknife	160.043	1	20%	0.2
Mirror, Signaling	160.020	2	20%	0.4
Sea anchor	160.019	1	20%	0.2
Water**	160.026	6	20%	1.2
<b>Total</b>		<b>28</b>	<b>20%</b>	<b>6</b>
<p><b>Note:</b> Values may not sum due to rounding.</p> <p>*This includes the first-aid kits described in the subchapters K and T section of this preamble, which are covered under the same approval subpart in the CFR.</p> <p>**For emergency drinking water, this only includes implementation in the first 5 years of the analysis period.</p> <p>We present the number of affected products in Years 6 through 10 of the analysis period later in this RA.</p>				

We estimate that it will take the technical staff 2 hours to prepare a new application, and the clerical staff will spend 0.17 hours (10 minutes)<sup>20</sup> per application on recordkeeping, for a total cost of \$139 per new application [(2 technical hours × \$67) + (0.17 clerical hours × \$30) = \$139]. For renewal applications, we estimate a burden of 0.5 technical hours and 0.17 clerical hours, for a total cost of \$39 [(0.5 technical hours × \$67) + (0.17 clerical hours × \$30) = \$39]. Under this rule, the Coast Guard no longer

<sup>20</sup> Based on information from the subchapter Q ICR.

requires approval applications for any new survival craft equipment. As shown in table 14, we estimate this will result in a cost saving to industry of approximately \$117 per year for new applications, and approximately \$219 per year for renewal applications. This results in a total annual cost savings of about \$336.

<b>Table 14: Annual Cost Savings of Industry for No Longer Having to Submit New and Renewal Certificate of Approval Applications</b>						
<b>Equipment</b>	<b>Approval Series</b>	<b>New Applications</b>		<b>Renewal Applications</b>		<b>Total Cost Savings</b>
		<b>Total Number of Applications*</b>	<b>Total Cost Savings</b>	<b>Total Number of Applications**</b>	<b>Total Cost Savings</b>	
		<b>(a)</b>	<b>(b)=(a)×[-\$139]</b>	<b>(c)</b>	<b>(d)=(c)×[-\$39]</b>	
Bilge pump	160.044	0.09	-\$13	0.60	-\$23	-\$36
Compass	160.014	0.09	-\$13	0.60	-\$23	-\$36
First-aid kit for Lifeboats	160.041	0.15	-\$21	1.00	-\$39	-\$60
First-aid kit for Liferafts	160.054	0.15	-\$21	1	-\$39	-\$60
Fishing kit	160.061	0.03	-\$4	0.20	-\$8	-\$12
Hatchet	160.013	0.03	-\$4	0.20	-\$8	-\$12
Jackknife	160.043	0.03	-\$4	0.20	-\$8	-\$12
Mirror, Signaling	160.020	0.06	-\$8	0.4	-\$16	-\$24
Sea anchor	160.019	0.03	-\$4	0.20	-\$8	-\$12
Water	160.026	0.18	-\$25	1.20	-\$47	-\$72
<b>Total</b>			<b>-\$117</b>		<b>-\$219</b>	<b>-\$336</b>
Note: Values may not sum due to rounding. * Refer to column (c) in table 3. ** Refer to column (c) in table 13.						

The Coast Guard is removing requirements that equipment must be marked with a Coast Guard approval number. With the exception of compasses and hatchets, equipment needs to be marked only to indicate that it meets standards set in ISO 18813. Compasses will no longer need to be marked with their Coast Guard approval number, but will still need to be marked to indicate they meet ISO 25862, as is currently required by the Coast Guard approval guidelines for magnetic compasses in lifeboats and rescue boats. Hatchets will not need to be marked at all, as they do not have to meet any consensus standard and because this rule removes the marking required by § 160.013-5.

The Coast Guard assumes the burden to mark the equipment is the same whether it is marked with a Coast Guard approval number or whether it is marked indicating that

it meets the ISO standard; therefore, this change will only result in a cost savings to the manufacturers of hatchets. The Coast Guard estimates that it takes industry 0.06 hours of production labor time<sup>21</sup> to mark each individual piece of equipment at a cost of \$1.56 ( $0.06 \text{ hours} \times \$26 = \$1.56$ ) per piece of equipment. We estimate that 92 hatchets will no longer need to be marked each year (see table 12), for a total cost savings of approximately \$144 ( $\$1.56 \times 92$ ).<sup>22</sup>

### ***Instructions***

The Coast Guard currently requires that equipment manufacturers provide instruction material with certain types of equipment to ensure that crew members have access to information on the proper use of the equipment. We currently require instructions for five of the nine types of equipment subject to this rulemaking: compasses, first-aid kits, mirrors, fishing kits, and jackknives. ISO 18813 requires instructions for three types of equipment: first-aid kits, mirrors, and fishing kits. ISO 18813 does not state that instructions need to be provided for compasses and jackknives; therefore, the manufacturers of compasses and jackknives will no longer have to develop and maintain instructions for their products under this rule.

Based on information in the current subchapter Q ICR (OMB Control Number 1625-0035), we estimate that it takes about 8 hours of time to prepare a set of instructional materials for new equipment, for a cost of about \$536 ( $8 \text{ hours} \times \$67/\text{hour}$ ).

Table 15 presents the total annual industry cost savings, \$64, for no longer having to develop new instructions for some types of new survival craft equipment. The total cost in columns (b) and (d), \$536, is the loaded wage of a safety engineer and inspector, \$67, multiplied by the estimated burden of work, 8 hours, for preparing a set of new

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<sup>21</sup> This is based on information from the subchapter Q ICR.

<sup>22</sup> This value is incorporated in column (a) of table 19.

instructions. This table presents the baseline scenario burden, the proposed post-regulatory scenario burden, and the difference between the two as cost savings.

<b>Table 15: Annual Cost Savings of Modifying New Instruction Requirements for Applicable Equipment</b>						
<b>Equipment</b>	<b>Approval Series</b>	<b>Baseline Scenario</b>		<b>Post-Regulatory Scenario</b>		<b>Total Cost Savings</b>
		<b>Total New Instructions</b>	<b>Total Cost</b>	<b>Total New Instructions</b>	<b>Total Cost</b>	
		<b>(a)</b>	<b>(b)=(a)×\$536</b>	<b>(c)</b>	<b>(d)=(c)×\$536</b>	
Compass	160.014	0.09	\$48	0	\$0	-\$48
First-aid kit for Lifeboats	160.041	0.15	\$80	0.15	\$80	\$0
First-aid kit for Liferafts	160.054	0.15	\$80	0.15	\$80	\$0
Fishing kit	160.061	0.03	\$16	0.03	\$16	\$0
Jackknife	160.043	0.03	\$16	0	\$0	-\$16
Mirror, Signaling	160.020	0.06	\$32	0.06	\$32	\$0
<b>Total</b>		<b>0.51</b>	<b>\$272</b>	<b>0.39</b>	<b>\$208</b>	<b>-\$64</b>
<b>Note:</b> Totals may not sum due to rounding.						

### ***Laboratory Testing and Recordkeeping***

As current regulations stand, the Coast Guard requires product testing and recordkeeping for some lifesaving equipment to ensure the equipment meets minimum performance requirements. Table 16 presents a comparison of the current Coast Guard testing requirements and the testing requirements stated in ISO 18813 and ISO 25862 (for compasses). This table also contains a qualitative description of the change in costs associated with modifying the current testing requirements. We were unable to obtain any cost data from the Coast Guard-approved labs that conduct the testing of this equipment, and we received no comments to the NPRM on this.<sup>23</sup>

<sup>23</sup> We asked four Coast Guard-approved laboratories for cost estimates for the testing requirements, but the labs were unable to provide any cost information.

**Table 16: Previous and New Product Testing Requirements**

<b>Product</b>	<b>Previous Testing Requirements</b>	<b>New Testing Requirements</b>	<b>Cost Impact</b>
Compasses	<ul style="list-style-type: none"> <li>• All testing requirements from section 4 of ISO 613<sup>a</sup></li> <li>• Dry Heat<sup>a</sup></li> <li>• Low Temperature<sup>a</sup></li> <li>• Vibration<sup>a</sup></li> <li>• Solar Radiation<sup>a</sup></li> <li>• Corrosion<sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>• All testing requirements for class B Compasses as stated in ISO 25862</li> <li>• Dry Heat</li> <li>• Damp Heat</li> <li>• Low Temperature</li> <li>• Vibration</li> <li>• Solar Radiation</li> <li>• Corrosion</li> </ul>	No cost change, as the requirements of ISO 613 and ISO 25862 are not substantively different.
Bilge Pump	<ul style="list-style-type: none"> <li>• Capacity Testing<sup>b</sup></li> <li>• Head Pressure Testing<sup>b</sup></li> <li>• Operating Lever Testing<sup>b</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Capacity Testing</li> <li>• Head Pressure Testing</li> <li>• Operating Lever Testing</li> </ul>	None. Testing requirements are the same.
Jackknife	<ul style="list-style-type: none"> <li>• Hardness Test<sup>c</sup></li> <li>• Bending and Drop Tests<sup>c</sup></li> <li>• Cutting Tests<sup>c</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Cutting Tests</li> </ul>	Unquantified cost savings. The Coast Guard is unable to assess the change in burden; there is no substantive data.
First-Aid for Lifeboats	<ul style="list-style-type: none"> <li>• Accelerated weathering<sup>d</sup></li> <li>• Salt spray<sup>d</sup></li> <li>• Temperature change<sup>d</sup></li> <li>• Container watertightness<sup>d</sup></li> <li>• Carton watertightness<sup>d</sup></li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	Unquantified cost savings. There is no change in testing requirements; therefore, there is no change in burden.
First-Aid for Liferrafts	<ul style="list-style-type: none"> <li>• Accelerated weathering<sup>e</sup></li> <li>• Salt Spray<sup>e</sup></li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	Unquantified cost savings. There is no change in testing requirements; therefore, there is no change in burden.
Mirrors	<ul style="list-style-type: none"> <li>• Reflection Test<sup>f</sup></li> <li>• Flatness Tests<sup>f</sup></li> <li>• Dropping Test<sup>f</sup></li> <li>• Salt Spray<sup>f</sup></li> <li>• Watertightness</li> </ul>	<ul style="list-style-type: none"> <li>• Reflection Test</li> <li>• Flatness Test</li> <li>• Dropping Test</li> <li>• Oil-Resistance Test</li> <li>• Lanyard Strength Test</li> </ul>	Unknown change in cost. The Coast Guard is unable to assess the change in burden as there is no substantive data.
Emergency Water	<ul style="list-style-type: none"> <li>• Chemical and biological analysis</li> <li>• Temperature Storage</li> <li>• Leakage</li> <li>• Water Immersion Testing</li> <li>• Durability</li> <li>• Corrosion</li> <li>• Drop</li> </ul>	<ul style="list-style-type: none"> <li>• Water quality must be verified by the local municipality or independent lab.</li> <li>• Low and High Temperature Storage</li> <li>• Leakage</li> <li>• Water Immersion Testing</li> <li>• Durability</li> <li>• Corrosion</li> <li>• Drop</li> </ul>	None. Testing requirements are the same, as under the ISO standard the water must satisfy international chemical and microbiological requirements. Concerning the water quality testing, the Coast Guard was unable to obtain any cost data from the laboratories.

**Sources:**

<sup>a</sup> “United States Coast Guard Approval Guideline for Magnetic Compasses in Lifeboats/Rescue Boats,” USCG Approval Series 160.014, December 2005.

<sup>b</sup> § 160.044-4

<sup>c</sup> § 160.043-5

<sup>d</sup> § 160.041-5

<sup>e</sup> § 160.054-5

<sup>f</sup> Documentation provided by subject matter experts in CG-ENG-4.

Based on the information from the current subchapter Q ICR, we estimate that recordkeeping takes 2 hours of clerical time per year and costs \$60 (2 hours × \$30 clerical staff loaded hourly wage rate). The Coast Guard is removing the requirements for testing records for seven types of equipment listed in this final rule, as these manufacturers no longer need these records to document that their products meet the requirements of the ISO 18813. Table 17 presents the total cost savings of about \$1,500 to industry from removing requirements to keep records of laboratory testing. The \$60 figure used in calculating total cost in columns (b) and (d) represents the loaded hourly wage of a record clerk (\$30) multiplied by the estimated burden of work for fulfilling recordkeeping requirements (2 hours). This table presents the baseline scenario burden and the post-regulatory scenario burden and then presents the difference of the two burdens as cost savings.

<b>Table 17: Annual Cost Savings to Manufacturers for Testing Recordkeeping Requirements</b>						
<b>Equipment</b>	<b>Approval Subpart</b>	<b>Baseline Scenario</b>		<b>Post-Regulatory Scenario</b>		<b>Total Cost Savings</b>
		<b>Total Products</b>	<b>Total Cost</b>	<b>Total Products</b>	<b>Total Cost</b>	
		<b>(a)</b>	<b>(b)=(a)×\$60</b>	<b>(c)</b>	<b>(d)=(c)×\$60</b>	
Bilge pump	160.044	3	\$180	0	\$0	-\$180
Compass	160.014	3	\$180	0	\$0	-\$180
First-aid kit for Lifeboats	160.041	5	\$300	0	\$0	-\$300
First-aid kit for Liferrafts	160.054	5	\$300	0	\$0	-\$300
Jackknife	160.043	1	\$60	0	\$0	-\$60
Mirror, Signaling	160.020	2	\$120	0	\$0	-\$120
Water	160.026	6	\$360	0	\$0	-\$360
<b>Total</b>		<b>25</b>	<b>\$1,500</b>	<b>0</b>	<b>\$0</b>	<b>-\$1,500</b>
<b>Note:</b> Totals may not sum due to rounding.						

### ***Laboratory Inspections***

The Coast Guard currently requires inspectors to examine the manufacturing process in order to ensure that quality control is maintained. This rule removes these requirements; however, the Coast Guard is unable to determine if this removal will

generate any cost savings to industry. Hence, the Coast Guard is not quantifying it as a cost savings. Manufacturers are likely to still have their production line inspected to ensure quality as part of best industry practices. Moreover, manufacturers may continue third-party testing to maintain certifications, such as the ISO 9001 standard, or to meet other regulatory obligations. At the time of this final rule, the Coast Guard does not have enough information to quantify any potential changes in cost resulting from the changes in inspection requirements.

Additionally, the Coast Guard requires inspecting entities to issue annual reports to enable a comparison between the production line and the prototype tested by the Coast Guard.<sup>24</sup> We were able to estimate a cost savings that resulted from the removal of this reporting requirement using information from the subchapter Q ICR, which estimated that this recordkeeping takes 24 hours of clerical time per year on average and costs \$720 (24 hours × \$30 clerical wage rate). The Coast Guard is removing this reporting requirement for all types of survival craft equipment. As shown in table 18, we estimate a total annual cost savings of approximately \$17,280. This table presents the baseline scenario burden, the post-regulatory scenario burden, and the difference between the two as cost savings.

<b>Table 18: Annual Cost Savings for Laboratory Inspection Records</b>						
<b>Equipment</b>	<b>Approval Series</b>	<b>Baseline Scenario</b>		<b>Post-Regulatory Scenario</b>		<b>Total Change in Cost</b>
		<b>Total Products</b>	<b>Total Cost</b>	<b>Total Products</b>	<b>Total Cost</b>	
		<b>(a)</b>	<b>(b) = (a)×\$720</b>	<b>(c)</b>	<b>(d)=(c)×\$720</b>	
Bilge pump	160.044	3	\$2,160	0	\$0	-\$2,160
Compass	160.014	3	\$2,160	0	\$0	-\$2,160
First-aid kit for Lifeboats	160.041	5	\$3,600	0	\$0	-\$3,600

<sup>24</sup> While the Coast Guard currently requires testing for jackknives, it does not require laboratory inspections. Therefore, there are no cost savings to jackknife manufacturers from this change.



Table 18: Annual Cost Savings for Laboratory Inspection Records						
Equipment	Approval Series	Baseline Scenario		Post-Regulatory Scenario		Total Change in Cost
		Total Products	Total Cost	Total Products	Total Cost	
		(a)	(b) = (a)×\$720	(c)	(d)=(c)×\$720	
First-aid kit for Liferafts	160.054	5	\$3,600	0	\$0	-\$3,600
Mirror, Signaling	160.020	2	\$1,440	0	\$0	-\$1,440
Water	160.026	6	\$4,320	0	\$0	-\$4,320
<b>Total</b>		<b>24</b>	<b>\$17,280</b>	<b>0</b>	<b>\$0</b>	<b>-\$17,280</b>
<b>Note:</b> Totals may not sum due to rounding.						

### *Total Cost Savings to Manufacturers*

Table 19 presents the annual total cost savings to equipment manufacturers. We estimate that manufacturers of Coast Guard-approved bilge pumps, lifeboats, compasses, first-aid kits, fishing kits, hatchets, jackknives, signaling mirrors, sea anchors, and emergency water will save approximately \$19,324 per year.

Table 19: Total Annual Cost Savings to Equipment Manufacturers						
Equipment	Approval Series	Application and Marking Requirements	Instruction Requirements	Product Testing	Laboratory Inspections	Total Cost Savings
		(a)	(b)	(c)	(d)	(e) = (a)+(b)+(c)+(d)
Bilge pump	160.044	-\$36	\$0	-\$180	-\$2,160	-\$2,376
Compass	160.014	-\$36	-\$48	-\$180	-\$2,160	-\$2,424
First-aid kit for Lifeboats	160.041	-\$60	-\$0	-\$300	-\$3,600	-\$3,960
First-aid kit for Liferafts	160.054	-\$60	-\$0	-\$300	-\$3,600	-\$3,960
Fishing kit	160.061	-\$12	-\$0	\$0	\$0	-\$12
Hatchet	160.013	-\$156	\$0	\$0	\$0	-\$156
Jackknife	160.043	-\$12	-\$16	-\$60	\$0	-\$88
Mirror, Signaling	160.020	-\$24	-\$0	-\$120	-\$1,440	-\$1,584
Sea anchor	160.019	-\$12	\$0	\$0	\$0	-\$12
Water	160.026	-\$72	\$0	-\$360	-\$4,320	-\$4,752
<b>Total</b>		<b>-\$480</b>	<b>-\$64</b>	<b>-\$1,500</b>	<b>-\$17,280</b>	<b>-\$19,324</b>

**Note:** Totals may not sum due to rounding.

### *Cost Savings to Vessel Owners or Operators*

After gathering price data from a variety of sources, we estimate that removing approval requirements will allow owners and operators of vessels to purchase less expensive equipment.<sup>25</sup> While there are several companies selling Coast Guard-approved equipment, online information generally does not specify whether the equipment meets ISO 18813 or similar standards. As a result, we had difficulty finding price data for survival craft equipment products clearly stating that they met ISO 18813 standards. However, we were able to identify prices for two products—emergency provisions and emergency water—that the manufacturer or advertiser explicitly stated met the requirements of the ISO 18813 standard.

We then applied percentage price difference between emergency water products and emergency provisions that had both Coast Guard approval and met the requirements of ISO 18813, and those emergency provisions and water products that met only the requirements of ISO 18813.<sup>26</sup> We estimate that products without Coast Guard approval affected by this rule were approximately 28 percent less expensive than products with Coast Guard approval.<sup>27</sup>

We applied this 28-percent price decrease to all the products affected by this rule, with the exception of first-aid kits, because the kit content requirements differ between the ISO standard and current Coast Guard standards, and we estimate the change in price for first-aid kits by the difference in replacement costs for first-aid kits. These

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<sup>25</sup> We looked at online retailers of survival craft equipment to assess price data. A search of online retailers determined that equipment that was not type-approved was less expensive than similar equipment that was type-approved.

<sup>26</sup> Although emergency provisions are not subject to changes in this final rule, we still examined them for the purposes of price comparison, as doing so provided a depth of data allowing us to determine a more robust ratio.

<sup>27</sup> We calculated this figure by finding the price differential for those products that were Coast Guard type-approved and those products that were not Coast Guard-approved but met ISO standards. We were not able to derive this figure for all of the products due to lack of industry data. However, given the similarity of the equipment type, we assume the price differences would be similar for all products.

differences are explained in further detail in the section, *First-Aid Kits*, in this RA. For this analysis, we quantified the cost savings to new vessels from being able to purchase less expensive equipment, and the cost savings to existing vessels of replacing expired items with less costly items. For durable items, without data to estimate how frequently these items are replaced, we are not able to estimate the cost savings to the owners and operators of existing vessels for purchasing replacement equipment that we estimate will be 28 percent cheaper. However, since emergency water and first-aid kits expire, we estimate the cost savings for purchasing replacement equipment for the owners and operators of both new and existing vessels based on how frequently this non-durable equipment must be replaced. This information is presented later in this RA.

***Durable Equipment: Bilge Pumps, Compasses, Fishing Kits, Hatchets, Jackknives, Mirrors, and Sea Anchors***

We estimate that only new vessels will purchase bilge pumps, compasses, fishing kits, hatchets, jackknives, mirrors, and sea anchors for their survival craft. Based on population estimates (presented in table 5), 25 new IBAs, 222 new liferafts, 33 new lifeboats, and 31 new rescue boats will be subject to this rule each year. Table 6 lists the survival equipment that lifeboats, liferafts, rescue boats, and IBAs are required to carry. We multiply the populations in table 5 by the carriage requirements in table 6 to yield the total number of items purchased for new survival craft in table 20. The Coast Guard requires new lifeboats to be equipped with bilge pumps, and there were 33 new lifeboats recorded in table 5, meaning there will be 33 purchases of new bilge pumps per year.<sup>28</sup> Only the new lifeboats with equipment packs for international voyages will require fishing kits (see table 6), and all new lifeboats and rescue boats will be equipped with

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<sup>28</sup> The Coast Guard requires all non-self-bailing lifeboats and rescue boats to have bilge pumps. Based on discussions with subject matter experts in CG-ENG-4, the Coast Guard estimates that all new lifeboats will be non-self-bailing and will therefore require bilge pumps, and all new rescue boats that are not also lifeboats will be self-bailing and therefore will not require bilge pumps.

compasses, for a total of 64 purchases of compasses each year. All 280 new IBAs, liferafts, and lifeboats are required to be equipped with mirrors. Finally, 218 liferafts with a SOLAS A or SOLAS B pack will be equipped with 2 sea anchors each. This rule will require that 93 IBAs, lifeboats, rescue boats, and liferafts with coastal service packs each have 1 sea anchor.

Table 20 presents the annual cost savings from new vessels removing Coast Guard approval for bilge pumps, compasses, fishing kits, hatchets, jackknives, mirrors, and sea anchors. In total, we estimate an annual cost savings of approximately \$78,324 for U.S.-flagged vessels by removing the type approvals for these 7 types of survival craft equipment.

<b>Table 20: Annual Cost Savings to New Vessels from Removing Coast Guard Approval for Bilge Pumps, Compasses, Fishing Kits, Hatchets, Jackknives, Mirrors, and Sea Anchors</b>						
<b>Equipment</b>	<b>Average Price of Coast Guard-Approved Equipment</b>	<b>Estimated Equipment Price without Coast Guard Approval Requirements</b>	<b>Difference</b>	<b>Number of Survival Craft</b>	<b>Average number of Items per Survival Craft</b>	<b>Total Cost Savings</b>
	<b>(a)</b>	<b>(b)=(a)×0.72</b>	<b>(c) = (b)-(a)</b>	<b>(d)</b>	<b>(e)</b>	<b>(f)=(c)×(d)×(e)</b>
Bilge pump	\$276	\$199	-\$77	33	1	-\$2,541
Compass	\$1,250	\$900	-\$350	64	1	-\$22,400
Fishing kit	\$41	\$30	-\$11	31	1	-\$341
Hatchet	\$28	\$20	-\$8	33	2	-\$528
Jackknife	\$34	\$24	-\$10	33	1	-\$330
Mirror, Signaling	\$19	\$14	-\$5	280	1	-\$1,400
Sea anchor (Liferafts with SOLAS A and SOLAS B packs)	\$343	\$247	-\$96	218	2	-\$41,856
Sea anchor (Other Survival Craft)	\$343	\$247	-\$96	93	1	-\$8,928
<b>Total</b>						<b>-\$78,324</b>
<b>Note:</b> Totals may not sum due to rounding. All product prices are rounded to the nearest whole dollar.						

### *Jackknives as a Replacement for Can Openers*

As specified in § 199.175(b)(5), the Coast Guard allows jackknives to meet the requirements of a can opener, thereby permitting jackknives to fulfill two requirements. Table 1 in § 199.175 states that only lifeboats and rigid liferafts with SOLAS A packs require can openers, and only lifeboats may carry jackknives. This means that rigid liferafts with SOLAS A packs are currently carrying both knives and can openers. This rule will allow these vessels to replace their knives with jackknives, resulting in a cost savings to vessel owners from being able to purchase only a jackknife instead of both a knife and a can opener. We estimate that there are a total of 136 new liferafts each year that carry SOLAS A packs and, further, assume that these vessel owners and operators will choose to replace a knife with a jackknife, thus forgoing the need to purchase a can opener.<sup>29</sup> We estimate the price of a can opener meeting the requirements of ISO 18813 to be \$6.<sup>30</sup> Therefore, we estimate that vessel owners and operators will save \$816 (136 SOLAS A liferafts × \$6 per can opener) for no longer needing can openers, because of meeting the jackknife requirements.

### ***Emergency Water***

The Coast Guard requires survival craft with SOLAS A packs be stocked with 3 liters of water per person, and that lifeboats with SOLAS B packs be stocked with 1.5 liters of water per person. We estimate the average cost of Coast Guard-approved water to be \$4 per liter,<sup>31</sup> while the cost of 1 liter of emergency water that meets the ISO 18813 standard to be \$3.<sup>32</sup> The price difference between the Coast Guard-approved water and water approved under ISO 18813 is \$1 per liter.<sup>33</sup> This is the estimated additional cost of

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<sup>29</sup> We estimate the cost savings for only one can opener because the use of a jackknife will only fulfill the replacement requirement for one can opener.

<sup>30</sup> We calculated this by taking the average of 10 can opener products on the market that meet ISO 18813 requirements. The Coast Guard will now require that can openers meet the standards of ISO 18813.

<sup>31</sup> We calculated this by taking the average of 14 Coast Guard-approved emergency drinking water products on the market.

<sup>32</sup> We calculated this by taking the average of 14 available emergency drinking water products on the market that were compliant with ISO 18813 only.

<sup>33</sup> To calculate this, we took the average of emergency drinking water prices that were Coast Guard-approved and subtracted them from emergency drinking water prices that need only meet the ISO standard.

Coast Guard approval, which is counted as cost savings. Emergency water expires and will need to be replaced every 5 years; therefore, the Coast Guard estimates that 20 percent of existing survival craft and 100 percent of new survival craft will need to purchase emergency water annually.

We estimate that industry will save a total of \$183,255 on an annual basis ( $3,215 \text{ survival craft} \times 19 \text{ people per survival craft} \times 3 \text{ liters of water} \times \$1 \text{ cost savings}$ ) for survival craft with SOLAS A packs during Years 1 through 5 of implementation.<sup>34</sup> To calculate this cost savings, we took the 12,690 existing liferafts with SOLAS A packs and 2,552 lifeboats with international voyage packs (see table 9) for a total of 15,242 existing survival craft that are required to stock emergency water. We then estimated that 20 percent ( $100 \text{ percent of these survival craft} \div 5 \text{ years}$ ) or 3,048 survival craft [ $(12,690 \text{ liferafts} \times 20 \text{ percent}) + (2,552 \text{ lifeboats} \times 20 \text{ percent})$ ] will replace their emergency water annually. Additionally, all 31 new lifeboats with international packs and 136 new liferafts with SOLAS A packs (see table 10) are required to buy emergency water. We summed these totals to get 3,215 survival craft that will need to purchase emergency water on an annual basis ( $3,048 \text{ existing survival craft} + 31 \text{ new lifeboats} + 136 \text{ new liferafts}$ ). Table 21 presents these cost savings.

In Years 6 through 10, there will be more cost savings, because vessels will have entirely replaced their survival craft equipment by Year 6, as described earlier in this rule. Therefore, we estimate an annual cost savings of about \$192,774 [ $3,382 \text{ survival craft} (3,215 + 167 \text{ new craft}) \times 19 \text{ people per survival craft} \times 3 \text{ liters of water} \times -\$1 \text{ cost savings}$ ] for survival craft with SOLAS A packs. Table 22 presents these cost savings.

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<sup>34</sup> We calculated this by taking the average of the survival craft capacity for all survival craft. We retrieved this data from the MISLE database in November 2020.

**Table 21: Total Cost Savings for Coast Guard Approval for Reduced Prices in Emergency Water for SOLAS A Packs in Years 1 through 5**

<b>Years 1 through 5</b>	<b>Total Liferafts and Lifeboats (a)</b>	<b>New Lifeboats and Liferafts (b)</b>	<b>Total Survival Craft (c)=(a)+(b)</b>	<b>Person per Life Saving Craft (d)</b>	<b>Liters of Water Required (e)</b>	<b>Total Water Needed in Liters (f) = (c)×(d)×(e)</b>	<b>Cost of Water (g)</b>	<b>Total Cost Savings (h) = (g) × (f)</b>
Baseline	3,048	167	3,215	19	3	183,255	\$4	\$733,020
Post-Regulatory	3,048	167	3,215	19	3	183,255	\$3	\$549,765
Change				<b>0</b>	<b>0</b>	<b>0</b>	<b>-\$1</b>	<b>-\$183,255</b>

**Note:** Totals may not sum due to rounding.

**Table 22: Total Cost Savings for Coast Guard Approval for Reduced Prices in Emergency Water for SOLAS A Packs in Years 6 through 10**

<b>Years 6 through 10</b>	<b>Total Liferafts and Lifeboats (a)</b>	<b>New Lifeboats and Liferafts (b)</b>	<b>Total Survival Craft (c)=(a)+(b)</b>	<b>Person per Life Saving Craft (d)</b>	<b>Liters of Water Required (e)</b>	<b>Total Water Needed in Liters (f)= (c)×(d)×(e)</b>	<b>Cost of Water (g)</b>	<b>Total Cost Savings (h)=(g)×(f)</b>
Baseline	3,215	167	3,382	19	3	192,774	\$4	\$771,096
Post-Regulatory	3,215	167	3,382	19	3	192,774	\$3	\$578,322
Change				<b>0</b>	<b>0</b>	<b>0</b>	<b>-\$1</b>	<b>-\$192,774</b>

**Note:** Totals may not sum due to rounding.

We used the same methodology when calculating the number of SOLAS A packs in Years 1 through 10 of implementation to estimate the total costs savings for survival craft with SOLAS B packs. There are a total of 283 existing lifeboats with SOLAS B packs (see table 9). We estimate that 20 percent of these survival craft or 57 survival craft ( $283 \text{ lifeboats} \times 20 \text{ percent}$ ) will replace their emergency water annually. Additionally, all 2 new lifeboats with SOLAS B packs are required to buy emergency water, for a total of 59 survival craft ( $57 \text{ lifeboats} + 2 \text{ new lifeboats}$ ) purchasing emergency water in Years 1 through 5. In Years 6 through 10, the number of existing lifeboats will increase by 2 to account for the new vessels that will be built in Years 1 through 5 (59) for a total of 61 survival craft ( $59 \text{ existing survival craft} + 2 \text{ new lifeboats}$ ).

The cost savings for survival craft with SOLAS B packs purchasing emergency water will be approximately \$1,682 ( $59 \text{ survival craft} \times 19 \text{ people per survival craft} \times 1.5 \text{ liters of water} \times -\$1 \text{ cost savings}$ ) in Years 1 through 5 and approximately \$1,739 ( $61 \text{ survival craft} \times 19 \text{ people per survival craft} \times 1.5 \text{ liters of water} \times -\$1 \text{ cost savings}$ ) in Years 6 through 10. Table 23 presents these cost savings in Years 1 through 5 of implementation, and table 24 presents these cost savings in Years 6 through 10 of implementation.



**Table 23: Total Cost Savings for Coast Guard Approval for Reduced Prices in Emergency Water for SOLAS B packs in Years 1 through 5**

<b>Water Years 1 – 5</b>	<b>New Liferrafts (a)</b>	<b>New Lifeboats (b)</b>	<b>Total new Survival Craft (c)=(a)+(b)</b>	<b>Person per Life Saving Craft (d)</b>	<b>Liters of Water Required (e)</b>	<b>Total Water (f)=[(c)×(d)×(e)]</b>	<b>Cost (g)</b>	<b>Total Cost Savings (h)=(f)×(g)</b>
Baseline	57	2	59	19	1.5	1,682	\$4	\$6,728
Post-Regulatory	57	2	59	19	1.5	1,682	\$3	\$5,046
Change	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-\$1</b>	<b>-\$1,682</b>
<b>Note:</b> Totals may not sum due to rounding.								

**Table 24: Total Cost Savings for Coast Guard Approval for Reduced Prices in Emergency Water for SOLAS B packs in Years 6 through 10**

<b>Water Years 6 – 10</b>	<b>New Liferafts (a)</b>	<b>New Lifeboats (b)</b>	<b>Total new Survival Craft (c)=(a)+(b)</b>	<b>Person per Life Saving Craft (d)</b>	<b>Liters of Water Required (e)</b>	<b>Total Water (f)=[(c)×(d)×(e)]</b>	<b>Cost (g)</b>	<b>Total Cost Savings (h)=(f)×(g)</b>
Baseline	59	2	61	19	1.5	1,739	\$4	\$6,956
Post-Regulatory	59	2	61	19	1.5	1,739	\$3	\$5,217
Change	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-\$1</b>	<b>-\$1,739</b>

**Note:** Totals may not sum due to rounding.

Table 25 presents the total annualized cost savings to vessel owners and operators from removing Coast Guard approval requirements for emergency water. The Coast Guard estimates an annualized cost savings of about \$188,923 with a 7-percent discount rate (\$189,372 with 3-percent discount rate).

<b>Table 25: Total Cost Savings to Vessels from Removing Coast Guard Approval for Reduced Prices in Emergency Water</b>					
<b>Year</b>	<b>Cost Savings for Vessels with SOLAS A Packs</b>	<b>Cost Savings for Vessels with SOLAS B Packs</b>	<b>Total Cost Savings</b>	<b>Annualized Cost Savings</b>	
				<b>3%</b>	<b>7%</b>
<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)=(b)+(c)</b>	<b>(e)=(d)÷1.03<sup>(a)</sup></b>	<b>(f)=(d)÷1.07<sup>(a)</sup></b>
1	-\$183,255	-\$1,682	-\$184,937	-\$179,550	-\$172,838
2	-\$183,255	-\$1,682	-\$184,937	-\$174,321	-\$161,531
3	-\$183,255	-\$1,682	-\$184,937	-\$169,244	-\$150,964
4	-\$183,255	-\$1,682	-\$184,937	-\$164,314	-\$141,088
5	-\$183,255	-\$1,682	-\$184,937	-\$159,528	-\$131,858
6	-\$192,774	-\$1,739	-\$194,513	-\$162,902	-\$129,612
7	-\$192,774	-\$1,739	-\$194,513	-\$158,157	-\$121,133
8	-\$192,774	-\$1,739	-\$194,513	-\$153,550	-\$113,208
9	-\$192,774	-\$1,739	-\$194,513	-\$149,078	-\$105,802
10	-\$192,774	-\$1,739	-\$194,513	-\$144,736	-\$98,881
<b>Total</b>	<b>-\$1,880,145</b>	<b>-\$17,105</b>	<b>-\$1,897,250</b>	<b>\$1,615,380</b>	<b>-\$1,326,915</b>
<b>Annualized</b>				<b>-\$189,372</b>	<b>-\$188,923</b>
<b>Note:</b> Totals may not sum due to rounding.					

### ***First-Aid Kits***

The Coast Guard is modifying the requirements for first-aid kits so that all first-aid kits in survival craft must meet the standards outlined in ISO 18813. In addition to removing the testing requirements for the kits, this change modifies the required contents of first-aid kits by removing the requirements for some items, adding additional items, or changing the number of mandatory items. Since items within the kits expire and need to be replaced, the change impacts both new and existing vessels, including small passenger vessels described in the *Subchapters K and T* section in this preamble. Table 26

highlights these differences in the first-aid kit requirement. Due to the differences in the first-aid kits, we estimate the cost of purchasing each of the individual items in the kit.

<b>Table 26: Crosswalk of First-Aid Kit Content Requirements</b>			
<b>Item</b>	<b>Number of Items Required</b>		
	<b>Lifeboats and Rescue Boat Requirements under § 160.041-4</b>	<b>Liferaft and IBA Requirements under § 160.054-4</b>	<b>ISO 18813 Requirements</b>
Adhesive Plasters	32 1-inch waterproof bandages	16 1-inch waterproof bandages	20 bandages in assorted sizes
Ammonia Inhalants	10	10	0
Analgesic Medication	50 doses	20 doses	48 doses
Antiseptic Preparations	10 iodine swabs	10 iodine swabs	10 applications
Burn Preparations	0	0	12 applications
Compression Bandage (for wounds)	5 4-inch bandages 8 2-inch bandages	1 4-inch bandage 4 2-inch bandages	10 sterile bandages in assorted sizes
Compression Bandage (for securing splints, dressings, etc.)	2 2-inch-by-6-yard bandages	2 2-inch-by-6-yard bandages	4 meters (4.4 yards) of adhesive elastic bandage
Eye Dressing Packet	3	3	0
Instructions	1	1	1
Sterile Gauze Compress	12 3-by-18-inch compresses	4 3-by-18-inch compresses	2
Tourniquet, with forceps, scissors and pins	1, 1, 1, and 12, respectively	1, 1, 1, and 12, respectively	0
Triangle Bandage	3 40-inch bandages	0	2
Waterproof Container	1	1	1
Wire Splint	1	1	0

### ***First-Aid Kits for Lifeboats and Rescue Boats***

We estimate that new vessels with lifeboats or rescue boats will have a cost savings as a result of the changes to first-aid kits, because we estimate that first-aid kits that meet the standard are \$41 less expensive than Coast Guard-approved kits under approval series 160.041. We estimate that a total of 64 new lifeboats and rescue boats will purchase a first-aid kit each year for a total costs savings of approximately \$2,624 (64 survival craft × \$41 cost savings).

The Coast Guard is not requiring existing vessels to replace their current kits; however, existing vessels must replace medication and ointments within the kits by their

expiration date. Currently, vessels must replace their iodine swabs, pain relief medication, and eye ointment, which we estimate costs about \$19 per kit.<sup>35</sup> We calculated the cost per kit by taking the average price for 10 different iodine swab products, 12 different pain relief medication, and 8 different eye ointments. Under this rule, these vessels will no longer have to replace eye ointment, and will need to replace fewer doses of pain relief medication. Additionally, vessel operators will be able to replace iodine swabs with less expensive antiseptic preparation. However, under this rule, vessels will incur an additional cost from replacing the burn cream in the kits, as required by ISO 18813 shown in table 26. We estimate the cost of replacing these items to be \$19, meaning the change is cost-neutral to existing vessels with lifeboat first-aid kits.<sup>36</sup>

### ***First-Aid Kits for Liferafts and IBAs***

We estimate that first-aid kits that meet the requirements of ISO 18813 will be, on average, \$1 less expensive than the Coast Guard-approved kits for liferafts and IBAs.<sup>37</sup> All 218 new liferafts and all 25 new IBAs will need to be equipped with the kits each year for an annual cost savings of \$243 (243 survival craft × - \$1 cost saving).<sup>38</sup> Liferaft first-aid kits are sealed in plastic bags, and most drugs expire within a 2- to 3-year timeframe. Vessel owners and operators have to replace the entire first-aid kit with a brand new kit after using even one item. Once the packaging for the kit is opened, the majority of items in it will have the same expiration date, not just the individual item.<sup>39</sup>

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<sup>35</sup> ISO 18813 uses the specific language of Analgesic and Ophthalmic when describing the medication in the first-aid kits. Refer to the appendix titled “Appendix B: Product Prices” in the docket folder for more information on product prices for these items that comprise the first-aid kit.

<sup>36</sup> The Coast Guard used the same price estimation for the average cost of these items as the cost it would take to replace them.

<sup>37</sup> The Coast Guard took the average price of six Coast Guard-approved first-aid kits and subtracted it from an average of six first-aid kits that met ISO standards.

<sup>38</sup> There are 222 liferafts affected by this rule, but those requiring SOLAS A and B packs (218 liferafts) will be required to have first-aid kits.

<sup>39</sup> We contacted a liferaft servicing firm to determine how the expired items in liferaft and lifeboat first-aid kits are replaced.

Therefore, the Coast Guard estimates that vessels will replace the items in their first-aid kits once they have expired, every 2.5 years (average of 2 and 3 years), and this process occurs during the annual servicing at an approved servicing facility.

We calculate that 40 percent (1 replacement every 2.5 years) of vessels will replace these items annually. Forty percent of all existing 2,612 IBAs and 22,377 liferafts [table 9 (sum of the totals for SOLAS A and SOLAS B for inflatable liferafts columns)] is 9,996 survival craft  $[(2,612 \text{ IBAs} \times 40 \text{ percent}) + (22,377 \text{ liferafts} \times 40 \text{ percent})]$ . Beginning in Year 3, the new survival craft from Year 1 will need to replace their kits for a total of 10,239 survival craft (9,996 existing survival craft + 243 survival craft built in Year 1). In Year 4, the new survival craft from Year 2 will need to replace their kits, but those from Year 1 will not need to do this, since they will have replaced their kits in the prior year. Therefore, the total needing to replace first-aid kits will still be 10,239 survival craft (9,996 existing survival craft + 243 survival craft built in Year 2). In Year 5, the survival craft built in Year 1 and Year 3 will replace their kits for a total of 10,482 survival craft (9,996 existing survival craft + 243 survival craft built in Year 1 + 243 survival craft built in Year 3). This pattern continues over the 10-year analysis period. In conclusion, we estimate the total annualized cost savings from removing Coast Guard approval for liferaft first-aid kits will be \$10,660 with a 7-percent discount rate as shown in table 27.

<b>Table 27: Total Cost Savings to Vessels from Removing Coast Guard Approval Requirements for First-Aid Kits in Liferafts and IBAs</b>							
<b>Year</b>	<b>Cost Savings to New Vessels</b>	<b>Cost Savings for Replacement Kits</b>			<b>Total Cost Savings</b>	<b>Annualized Cost Savings</b>	
		<b>Total Survival Craft Replacing Kits</b>	<b>Cost Savings for Replacement</b>	<b>Total Cost Savings for Replacements</b>		<b>3%</b>	<b>7%</b>
<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>	<b>(e)=(c)×(d)</b>	<b>(f)=(b)+(e)</b>	<b>(g)=(f)÷1.03<sup>(a)</sup></b>	<b>(h)=(f)÷1.07<sup>(a)</sup></b>
1	-\$243	9,996	-\$1	-\$9,996	-\$10,239	-\$9,941	-\$9,569
2	-\$243	9,996	-\$1	-\$9,996	-\$10,239	-\$9,651	-\$8,943
3	-\$243	10,239	-\$1	-\$10,239	-\$10,482	-\$9,593	-\$8,556

4	-\$243	10,239	-\$1	-\$10,239	-\$10,482	-\$9,313	-\$7,997
5	-\$243	10,482	-\$1	-\$10,482	-\$10,725	-\$9,251	-\$7,647
6	-\$243	10,482	-\$1	-\$10,482	-\$10,725	-\$8,982	-\$7,147
7	-\$243	10,725	-\$1	-\$10,725	-\$10,968	-\$8,918	-\$6,830
8	-\$243	10,725	-\$1	-\$10,725	-\$10,968	-\$8,658	-\$6,383
9	-\$243	11,968	-\$1	-\$11,968	-\$11,211	-\$8,592	-\$6,098
10	-\$243	11,968	-\$1	-\$11,968	-\$11,211	-\$8,342	-\$5,699
<b>Total</b>						<b>-\$91,242</b>	<b>-\$ 74,870</b>
<b>Annualized</b>						<b>-\$10,696</b>	<b>-\$10,660</b>
<b>Note:</b> Totals may not sum due to rounding.							

### ***First-Aid Kits for Small Passenger Vessels (Subchapter K and Subchapter T)***

This final rule will also remove Coast Guard approval requirements for first-aid kits aboard small passenger vessels, which the Coast Guard regulates under subchapters K and T. Small passenger vessels are currently required to have first-aid kits approved under approval series 160.041; therefore, we used the same cost savings estimates for replacing first-aid kits in the section titled ***First-Aid Kits for Lifeboats and Rescue Boats***. This comes to \$41 per first-aid kit. The Coast Guard applied these estimates to small passenger vessels, which will no longer need Coast Guard approval for the first-aid kits aboard the vessels themselves. We estimate that there will be 40 new small passenger vessels every year (see table 5). All of the 40 new passenger vessels will need to be equipped with first-aid kits each year, for an annual cost savings of \$1,640.

### ***Total Cost Savings to Vessel Owners and Operators***

Table 28 presents the annual undiscounted total cost savings to vessel owners and operators by equipment type, and table 29 presents the total annualized cost savings. We estimate the total undiscounted costs savings to vessel owners and operators at \$2.85 million over a 10-year period of analysis, with an annualized total cost savings of about \$284,481 discounted at 7 percent (\$284,966 with a 3-percent discount rate).

**Table 28: Total Cost Savings to Vessel Owners and Operators**

Year	Bilge pump	Compass	First-Aid Kits for Lifeboats	First-Aid Kits for Liferafts	Fishing Kit	Hatchet	Jackknife*	Mirrors	First-Aid Kits for Subchapter K & T	Sea Anchor	Water	Total Cost Savings
1	-\$2,541	-\$22,400	-\$2,624	-\$10,239	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$184,937	-\$280,074
2	-\$2,541	-\$22,400	-\$2,624	-\$10,239	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$184,937	-\$280,074
3	-\$2,541	-\$22,400	-\$2,624	-\$10,482	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$184,937	-\$280,317
4	-\$2,541	-\$22,400	-\$2,624	-\$10,482	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$184,937	-\$280,317
5	-\$2,541	-\$22,400	-\$2,624	-\$10,725	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$184,937	-\$280,560
6	-\$2,541	-\$22,400	-\$2,624	-\$10,725	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$194,513	-\$290,136
7	-\$2,541	-\$22,400	-\$2,624	-\$10,968	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$194,513	-\$290,379
8	-\$2,541	-\$22,400	-\$2,624	-\$10,968	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$194,513	-\$290,379
9	-\$2,541	-\$22,400	-\$2,624	-\$11,211	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$194,513	-\$290,622
10	-\$2,541	-\$22,400	-\$2,624	-\$11,211	-\$341	-\$528	-\$2,640	-\$1,400	-\$1,640	-\$50,784	-\$194,513	-\$290,622
<b>Total</b>	<b>-\$25,410</b>	<b>-\$224,000</b>	<b>-\$26,240</b>	<b>-\$107,250</b>	<b>-\$3,410</b>	<b>-\$5,280</b>	<b>-\$26,400</b>	<b>-\$14,000</b>	<b>-\$16,400</b>	<b>-\$507,840</b>	<b>-\$1,897,250</b>	<b>-\$2,853,480</b>

Note: Totals may not sum due to rounding.

\*Includes the estimated cost savings from both removing Coast Guard approval for jackknives and allowing vessels to replace knives with jackknives and the cost savings of no longer needing one can opener for SOLAS A liferafts.

<b>Table 29: Annualized Cost Savings to Vessel Owners and Operators</b>			
Year	Total Cost Savings	Annualized Cost Savings	
		3%	7%
(a)	(b)	(c)=(b)÷1.03 <sup>(a)</sup>	(d)=(b)÷1.07 <sup>(a)</sup>
1	-\$280,074	-\$271,917	-\$261,751
2	-\$280,074	-\$263,997	-\$244,627
3	-\$280,317	-\$256,530	-\$228,822
4	-\$280,317	-\$249,058	-\$213,852
5	-\$280,560	-\$242,014	-\$200,035
6	-\$290,136	-\$242,984	-\$193,330
7	-\$290,379	-\$236,105	-\$180,833
8	-\$290,379	-\$229,228	-\$169,003
9	-\$290,622	-\$222,738	-\$158,079
10	-\$290,622	-\$216,250	-\$147,737
Total	-\$2,853,480	-\$2,430,819	-\$1,998,072
Annualized		<b>-\$284,966</b>	<b>-\$284,481</b>
<b>Note:</b> Totals may not sum due to rounding.			

### ***Total Cost Savings to Industry***

Table 30 presents the total annualized costs savings to industry over the 10-year period of analysis. At a 7-percent discount rate, the cost savings is approximately \$303,805.

<b>Table 30: Total Annualized Cost Savings to Industry</b>					
Year	Total Cost Savings to Manufacturers*	Total Cost Savings to Vessels**	Total Cost Savings	Annualized Cost Savings	
				3%	7%
(a)	(b)	(c)	(d) = (b) + (c)	(e)=(d)÷1.03 <sup>(a)</sup>	(f)=(d)÷1.07 <sup>(a)</sup>
1	-\$19,324	-\$280,074	-\$299,398	-\$290,678	-\$279,811
2	-\$19,324	-\$280,074	-\$299,398	-\$282,211	-\$261,506
3	-\$19,324	-\$280,317	-\$299,641	-\$274,214	-\$244,596
4	-\$19,324	-\$280,317	-\$299,641	-\$266,227	-\$228,595
5	-\$19,324	-\$280,560	-\$299,884	-\$258,683	-\$213,813
6	-\$19,324	-\$290,136	-\$309,460	-\$259,168	-\$206,206
7	-\$19,324	-\$290,379	-\$309,703	-\$251,817	-\$192,867
8	-\$19,324	-\$290,379	-\$309,703	-\$244,482	-\$180,250
9	-\$19,324	-\$290,622	-\$309,946	-\$237,548	-\$168,590
10	-\$19,324	-\$290,622	-\$309,946	-\$230,629	-\$157,561
Total	<b>-\$193,240</b>	<b>-\$2,853,480</b>	<b>-\$3,046,720</b>	<b>-\$2,595,657</b>	<b>-\$2,133,796</b>
Annualized				<b>-\$304,290</b>	<b>-\$303,805</b>
<b>Note:</b> Totals may not sum due to rounding.					
* Table 19					



***Federal Government Cost Savings***

We estimate that this rule will reduce costs to the Federal Government, since the Coast Guard will no longer review COA applications, application renewals, or inspection reports for the equipment that is subject to this rule. The Coast Guard does not anticipate that this rule will generate any cost savings from vessels inspections, as this rule does not modify any inspection requirements.

***Equipment Approval***

In addition to generating a cost savings to industry by removing COA application requirements, this rule will also create a cost savings to the Federal Government, as Coast Guard staff will no longer review new COA applications and renewals. We estimate that it takes 24 hours of a GS-14's time to review each new application and 4 hours to review each renewal.<sup>40</sup> We estimate the cost of reviewing a new application at \$2,672 (rounded) per applicant (24 hours  $\times$  \$111.34 ), and the cost for reviewing a renewal application at \$445(rounded) per renewal (4 hours  $\times$  \$111.34). In table 31, the cost of reviewing a new application is captured in column (b) and the cost of a renewal application is captured in column (d). In total, we estimate the Federal Government will save \$4,735 each year, due to this rule removing the requirements of having to review COA applications.

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<sup>40</sup> This is based on information from the subchapter Q ICR. For the wage rate, \$111.34, please see the *Wages* section of this RA.

**Table 31: Annual Cost Savings to Federal Government for No Longer Having to Review New and Renewal Certificate of Approval Applications**

Equipment	Approval Series	New Applications		Renewal Applications		Total Change in Cost = Total Cost Savings
		Total Number of Applications	Total Cost	Total Number of Applications	Total Cost	
		(a)	(b)=(a)× [-\$2,672]	(c)	(d)=(c)×[-\$445]	
Bilge pump	160.044	0.09	-\$240	0.60	-\$267	-\$507
Compass	160.014	0.09	-\$240	0.60	-\$267	-\$507
First-aid kit for Lifeboats	160.041	0.15	-\$401	1	-\$445	-\$846
First-aid kit for Liferafts	160.054	0.15	-\$401	1	-\$445	-\$846
Fishing kit	160.061	0.03	-\$80	0.20	-\$89	-\$169
Hatchet	160.013	0.03	-\$80	0.20	-\$89	-\$169
Jackknife	160.043	0.03	-\$80	0.20	-\$89	-\$169
Mirror, Signaling	160.020	0.06	-\$160	0.4	-\$178	-\$338
Sea anchor	160.019	0.03	-\$80	0.20	-\$89	-\$169
Water	160.026	0.18	-\$481	1.20	-\$534	-\$1015
<b>Total</b>	-	-	<b>-\$2,243</b>	-	<b>-\$2,492</b>	<b>-\$4,735</b>

**Note:** Totals may not sum due to rounding.

### ***Laboratory Inspections***

The Coast Guard currently requires manufacturers of some equipment to submit an annual report with the results of laboratory inspections, allowing the Coast Guard to ensure the production stock of the equipment will be identical to those originally tested and approved by the Coast Guard. This rule removes this reporting requirement for equipment that is now self-certified by the manufacturer. We were unable to obtain data about the costs related to laboratory inspections.

We estimate that it takes approximately 2 hours of a GS-14 senior engineer's time to review each report, costing \$223 (2 hours  $\times$  \$111.34). Table 32 presents the total annual cost saving to the Federal Government for no longer having to review laboratory inspection reports. We estimate these cost savings will be \$5,352 per year.

<b>Table 32: Annual Federal Government Cost Savings for No Longer Having to Review Laboratory Inspection Records</b>						
<b>Equipment</b>	<b>Approval Series</b>	<b>Baseline Scenario</b>		<b>Post-Regulatory Scenario</b>		<b>Total Change in Cost = Total Cost Savings</b>
		<b>Total Products</b>	<b>Total Cost</b>	<b>Total Products</b>	<b>Total Cost</b>	
		<b>(a)</b>	<b>(b)=(a)×\$223</b>	<b>(c)</b>	<b>(d)=(c)×\$223</b>	
Bilge pump	160.044	3	\$669	0	\$0	-\$669
Compass	160.014	3	\$669	0	\$0	-\$669
First-aid kit for Lifeboats	160.041	5	\$1,115	0	\$0	-\$1,115
First-aid kit for Liferrafts	160.054	5	\$1,115	0	\$0	-\$1,115
Mirror, Signaling	160.020	2	\$446	0	\$0	-\$446
Water	160.026	6	\$1,338	0	\$0	-\$1,338
<b>Total</b>		<b>24</b>	<b>\$5,352</b>	<b>0</b>	<b>0</b>	<b>-\$5,352</b>
<b>Note:</b> Totals may not sum due to rounding.						

### ***Total Federal Government Savings***

Table 33 presents the total annual cost savings to the Federal Government. In total, the Coast Guard estimates this rule to generate a cost savings of approximately \$10,087 per year.

<b>Table 33: Total Annual Cost Savings to the Federal Government</b>					
<b>Equipment</b>	<b>Approval Series</b>	<b>New Applications Avoided</b>	<b>Renewed Applications Avoided</b>	<b>Avoided Inspection Reports</b>	<b>Total Cost Savings</b>
		<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d) = (a)+(b)+(c)</b>
Bilge pump	160.044	-\$240	-\$267	-\$669	<b>-\$1,176</b>
Compass	160.014	-\$240	-\$267	-\$669	<b>-\$1,176</b>
First-aid kit for Lifeboats	160.041	-\$401	-\$445	-\$1,115	<b>-\$1,961</b>
First-aid kit for Liferrafts	160.054	-\$401	-\$445	-\$1,115	<b>-\$1,961</b>
Fishing kit	160.061	-\$80	-\$89	\$0	<b>-\$169</b>
Hatchet	160.013	-\$80	-\$89	\$0	<b>-\$169</b>
Jackknife	160.043	-\$80	-\$89	\$0	<b>-\$169</b>
Mirror, Signaling	160.020	-\$160	-\$178	-\$446	<b>-\$784</b>
Sea anchor	160.019	-\$80	-\$89	\$0	<b>-\$169</b>
Water	160.026	-\$481	-\$534	-\$1,338	<b>-\$2,353</b>
<b>Total</b>		<b>-\$2,243</b>	<b>-\$2,492</b>	<b>-\$5,352</b>	<b>-\$10,087</b>

<b>Note:</b> Totals may not sum due to rounding.
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### **Change in Safety**

Many of the current Coast Guard type approval requirements for survival craft equipment were developed in the 1950s and 1960s and have not been significantly updated since they were initially published. Upon a thorough review of these requirements, Coast Guard enforcement procedures, current maritime industry practice, and the availability of new international standards, we have determined that the additional scrutiny of the Coast Guard type approval does not increase or decrease the safety for the equipment subject to this rule. For these nine types of survival craft equipment, the current Coast Guard type approval requirements are outdated and overly prescriptive. Therefore, the Coast Guard anticipates that by having equipment meet consensus standards, as opposed to Coast Guard standards, there will be no decrease in the level of safety in the maritime environment.

### ***No Cost Changes***

This rule will also implement several changes with no cost impacts. The vast majority of these changes are the result of modifying the current lifeboat equipment requirements for sailing school vessels as stated in § 169.527 to align them with the requirements stated in § 199.175. Table 34 summarizes these changes.

**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
Bailer	§ 169.529(a)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirements that bailers in lifeboats on sailing school vessels meet the requirements of § 169.529(a) and instead, they must meet the requirements of § 199.175(b)(1).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(a) and 199.175(b)(1) are identical.
Boathooks	§ 169.529(c)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirements that boathooks in lifeboats on sailing school vessels meet the prescribed design requirements of § 169.529(c) and instead, they must meet the requirements of § 199.175(b)(3) and be designed to minimize the possibility of damage.	Sections 169.529(c) and 199.175(b)(3) set different standards for boathooks; however, only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.
Can Openers	§ 199.175(b)(5)	All U.S.-flagged Vessels with Lifeboats or Liferrafts with SOLAS A packs	Can openers must meet the standards of ISO 18813.	ISO 18813 requires that can openers in liferafts be of the safety type. The Coast Guard estimates that all liferafts are currently equipped with either a safety can opener or a can opener within the jackknife; therefore, this change poses no additional cost to industry.
Cover, Protecting	§ 169.529(II)	New U.S.-flagged Sailing School Vessels with Lifeboats	Fully enclosed lifeboats on sailing school vessels do not need to be equipped with a cover.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.  In addition, fully enclosed lifeboats do not require a cover; therefore, it is likely they are not equipped with one under the baseline.
Ditty Bag	§ 169.529(f)	New U.S.-flagged Sailing School Vessels with Lifeboats	Motor-propelled lifeboats on sailing school vessels no longer need to carry a ditty bag.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-

**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
				flagged sailing school vessels will be built during the analysis period.
Drinking Cups	§ 169.529(g)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirements that drinking cups in lifeboats on sailing school vessels meet the requirements of § 169.529(g) and instead, they must meet the requirements of § 199.175(b)(8).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(g) and 199.175(b)(8) are identical.
Fire Extinguisher	§ 169.529(h), § 199.175(b)(9)	All New U.S.-flagged Vessels with IBAs, Liferrafts, Lifeboats, or Rescue Boats	Updates fire extinguisher rating names from B-C, size II to 40-B to match other regulatory text in title 46 of the CFR.	This change does not require fire extinguishers meet any different requirements as laid out in the final rule, “Harmonization of Standards for Fire Protection, Detection and Extinguishing Equipment” (81 FR 482200 July 22, 2016), only that they have a label.  A review of portable marine fire extinguishers found that both the Coast Guard and UL ratings are currently provided for each product.
First-Aid Kits	§ 121.710 § 160.010-3(e)(7)(ii) Subpart 160.041 Subpart 160.054 § 160.151-21(h) § 169.529(i) § 184.710 § 199.050(c) § 199.175(b)(10)	All U.S.-flagged Vessels with IBAs, Liferrafts with a SOLAS A or B pack, Lifeboats, or Rescue Boats. All small passenger vessels in Subchapters K and T	All medicinal products within the first-aid kits must use active ingredients that conform to OTC drug regulations set out in 21 CFR part 330	The Coast Guard estimates that, under the baseline, all medicinal products meet U.S. OTC drug standards. The Coast Guard did an extensive inquiry to ensure that the medicinal products were FDA compliant.
Flashlights	§ 169.529(j)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that flashlights in lifeboats on sailing school vessels meet the prescribed design requirements of § 169.529(j) and instead, they must meet the requirements of § 199.175(b)(12) and be constructed and marked according to the American Society for Testing and Materials’ ASTM F1014 standard already incorporated by reference in that section.	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards.
Heaving Lines	§ 169.529(l)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that heaving lines on lifeboats on sailing school vessels meet the	This is an administrative change that allows the Coast Guard to consolidate its survival craft

**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
			requirements of § 169.529(l), and instead, they must meet the requirements of § 199.175(b)(14).	equipment standards, and the requirements of §§ 169.529(l) and 199.175(b)(14) are identical.
Ladder	§ 169.529(n)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that ladders on lifeboats on sailing school vessels meet the requirements of § 169.529(n), and instead, they must meet the requirements of § 199.175(b)(18).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(n) and 199.175(b)(18) are identical.
Lanterns	§ 169.529(o)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that lifeboats on sailing school vessels carry lanterns.	Only new U.S.-flagged sailing school vessels are impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.
Lifelines	§ 169.529(p)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes lifeline standards from § 169.529(p).	This is an administrative change, as lifelines are not survival craft equipment and are, instead, regulated as part of the lifeboat design requirements under § 160.135-7.
Life Preservers	§ 169.529(q)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that lifeboats on sailing school vessels carry two additional life preservers in their lifeboat.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.
Lockers	§ 169.529(r)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that lifeboats on sailing school vessels have lockers for the storage of small items.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.
Mast and Sail	§ 169.529(s)	New U.S.-flagged Sailing School Vessels with Lifeboats	Clarifies that motor-propelled lifeboats on sailing school vessels do not need to carry a mast or sails.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.



**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
				In addition, motorized boats do not require a mast or sails; therefore, they are not equipped with them under the baseline.
Matches	§ 169.529(t)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that lifeboats on sailing school vessels carry matches.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.
Oars	§ 169.529(v)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that oars on lifeboats on sailing school vessels meet the requirements of § 169.529(v), and instead, they must meet the requirements of § 199.175(b)(20). In addition, the Coast Guard is modifying the number of required oars from four rowing and one steering, to the number required by the manufacturer.	<p>This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(v) and 199.175(b)(20) are identical. There are no cost savings because there are no sailing school vessels with lifeboats.</p> <p>In addition, only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.</p>
Oil, Illuminating	§ 169.529(w)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that lifeboats on sailing school vessels carry illuminating oil for lanterns.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.
Oil, Storm	§ 169.529(x)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that lifeboats on sailing school vessels carry storm oil to calm the seas.	Only new U.S.-flagged sailing school vessels will be impacted by the change, and the Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period.

**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
Painters	§ 169.529(y)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that painters on lifeboats on sailing school vessels meet the requirements of § 169.529(y), and instead, they must meet the requirements of § 199.175(b)(21).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(n) and 199.175(b)(18) are identical.
Plug	§ 169.529(z)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes plug standards from § 169.529(z).	This is an administrative change, as plugs are not survival craft equipment and are, instead, regulated as part of the lifeboat design requirements under § 160.135-7
Provisions	Subpart 160.046	All manufacturers of Coast Guard-approved provisions	Adds to the scope: emergency provisions approved to be carried in lifeboats and liferafts. These provisions meet the IMO recommendations for emergency food rations.	This is an administrative change, as this rule will update § 199.175(b)(22) and add regulatory text to subpart 160.046 stating that the provisions or food rations must comply with ISO 18813 paragraph 4.31, which is the same as the current standard.
Rowlocks	§ 169.529(bb)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that rowlocks on lifeboats on sailing school vessels meet the requirements of § 169.529(bb) and instead, they must meet the requirements of § 199.175(b)(20).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(bb) and 199.175(b)(20) are identical.
Rudder and Tiller	§ 169.529(cc)	New U.S.-flagged Sailing School Vessels with Lifeboats	Removes rudder and tiller standards from § 169.529(cc), which state the rudder and tiller must be constructed according to § 169.035-3(f).	This is an administrative change, as § 169.035-3(f) was removed previously from the CFR, and the section no longer exists.
Signals, Distress Floating Orange Smoke	§ 169.529(ee)	New and Existing U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that distress floating orange smoke signals on lifeboats on sailing school vessels meet the requirements of § 169.529(ee), and instead, they must meet the requirements of § 199.175(b)(30).	<p>The change will apply to both new U.S.-flagged sailing school vessels with lifeboats, and existing sailing school vessels with lifeboats, as these vessels will have to replace their smoke signals after they expire.</p> <p>The Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period. In addition, there are no existing sailing school</p>

**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
				vessels with lifeboats; therefore, no existing vessels will be impacted by the change.
Signals, Distress Red Hand Flare	§ 169.529(ff)	All U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that distress red hand flare signals on lifeboats on sailing school vessels meet the requirements of § 169.529(ff), and instead, they must meet the requirements of § 199.175(b)(31).	<p>The change will apply to both new U.S.-flagged sailing school vessels with lifeboats, and existing sailing school vessels with lifeboats, as these vessels will have to replace their smoke signals after they expire.</p> <p>The Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period. In addition, there are no existing sailing school vessels with lifeboats; therefore, no existing vessels will be impacted by the change.</p>
Signals, Distress Red Parachute Flare	§ 169.529(gg)	All U.S.-flagged Sailing School Vessels with Lifeboats	Removes requirement that distress red parachute flares on lifeboats on sailing school vessels meet the requirements of § 169.529(gg), and instead, they must meet the requirements of § 199.175(b)(32).	<p>The change will apply to both new U.S.-flagged sailing school vessels with lifeboats and existing sailing school vessels with lifeboats, as these vessels will have to replace their smoke signals after they expire.</p> <p>The Coast Guard estimates that no new U.S.-flagged sailing school vessels will be built during the analysis period. In addition, there are no existing sailing school vessels with lifeboats; therefore, no existing vessels will be impacted by the change.</p>
Table of Lifesaving Signals	§ 169.529(mm)	New U.S.-flagged Sailing School Vessels with IBAs, Liferrafts, Lifeboats, or Rescue Boats	Removes requirement that table of lifesaving signals on lifeboats on sailing school vessels meet the requirements of § 169.529(mm), and instead, they must meet the requirements of § 199.175(b)(36).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(mm) and 199.175(b)(36) are identical.
Tool Kit	§ 169.529(hh)	New U.S.-flagged Sailing School Vessels	Removes requirements that toolkits on lifeboats on sailing school vessels meet the requirements of §	This is an administrative change that allows the Coast Guard to

**Table 34: Summary of Regulatory Changes with No Cost Impacts**

<b>Equipment</b>	<b>CFR Subpart/Section(s)</b>	<b>Affected Population</b>	<b>Changes</b>	<b>Basis for No Cost</b>
		with IBAs, Liferafts, Lifeboats, or Rescue Boats	169.529(hh), and instead, they must meet the requirements of § 199.175(b)(38).	consolidate its survival craft equipment standards, and the requirements of §§ 169.529(hh) and 199.175(b)(38) are identical.
Whistle	§ 169.529(jj)	New U.S.-Flagged Sailing School Vessels with IBAs, Liferafts, Lifeboats, or Rescue Boats	Removes requirement that whistles on lifeboats on sailing school vessels meet the requirements of § 169.529(jj), and instead, they must meet the requirements of § 199.175(b)(41).	This is an administrative change that allows the Coast Guard to consolidate its survival craft equipment standards, and the requirements of §§ 169.529(jj) and 199.175(b)(41) are identical.

## Total Cost Savings

Table 35 presents the total annualized cost savings of this final rule to both industry and the Federal Government for the 10-year period of analysis. The Coast Guard estimates an annualized cost savings of approximately \$314,377 with a 3-percent discount rate, and \$313,892 with a 7-percent discount rate.

<b>Table 35: Total Annualized Cost Savings to Industry and Federal Government</b>					
<b>Year</b>	<b>Total Cost Savings to Industry*</b>	<b>Total Cost Savings to Federal Government**</b>	<b>Total Cost Savings</b>	<b>Annualized Cost Savings</b>	
				<b>3%</b>	<b>7%</b>
<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d) = (b) + (c)</b>	<b>(e)=(d)÷1.03<sup>(a)</sup></b>	<b>(f)=(d)÷1.07<sup>(a)</sup></b>
1	-\$299,398	-\$10,087	-\$309,485	-\$300,471	-\$289,238
2	-\$299,398	-\$10,087	-\$309,485	-\$291,719	-\$270,316
3	-\$299,641	-\$10,087	-\$309,728	-\$283,445	-\$252,830
4	-\$299,641	-\$10,087	-\$309,728	-\$275,189	-\$236,290
5	-\$299,884	-\$10,087	-\$309,971	-\$267,384	-\$221,005
6	-\$309,460	-\$10,087	-\$319,547	-\$267,616	-\$212,928
7	-\$309,703	-\$10,087	-\$319,790	-\$260,019	-\$199,149
8	-\$309,703	-\$10,087	-\$319,790	-\$252,445	-\$186,121
9	-\$309,946	-\$10,087	-\$320,033	-\$245,279	-\$174,077
10	-\$309,946	-\$10,087	-\$320,033	-\$238,135	-\$162,689
<b>Total</b>	<b>-\$3,046,720</b>	<b>-\$100,870</b>	<b>-\$3,147,590</b>	<b>-\$2,681,701</b>	<b>-\$2,204,643</b>
<b>Annualized</b>				<b>-\$314,377</b>	<b>-\$313,892</b>
<b>Note:</b> Totals may not sum due to rounding. * Table 30 ** Table 33					

## Discussion of Alternatives

When creating this rule, the Coast Guard considered four alternatives, one of which was suggested by public comment. In this section, we examine how the cost of the rulemaking changes with each alternative.

### *Alternative 1: No Action*

Using this alternative, the Coast Guard will accept the status quo and not replace the current approval requirements with an international consensus standard. This alternative will not harmonize Coast Guard standards with industry consensus standards,

nor reduce the burden to industry. This will not incur approximately \$314,000 in annual cost savings with no estimated benefits.

*Alternative 2: Preferred Alternative—Remove the Need for Coast Guard*

*Approval*

Using this alternative, the Coast Guard will implement the changes regarding the removal of Coast Guard approval standards. This will lead to an estimated \$314,000 in annual cost savings without any estimated reduction in benefits, as this analysis shows.

*Alternative 3: Remove the Need for Coast Guard Approval and Marking*

*Requirements*

Under this alternative, the Coast Guard will implement the changes in the preferred alternative, but will, in addition, remove the requirement that equipment be marked to indicate it meets ISO 25862, ISO 17339, or ISO 18813. This will lead to an additional annual cost savings of approximately \$397,433. We estimate this by multiplying 254,765 pieces of equipment by \$1.56 (allowing 0.06 hours  $\times$  \$26 production rate per hour for the time and cost to mark each piece of equipment). This will lead to a total cost savings of \$711,433, which we calculated by adding the additional savings from no markings (\$397,433) to the total estimated cost savings of this rule, as shown in alternative 2 (\$314,000).

We rejected this alternative for the preferred alternative, since eliminating the markings will make it impossible for the Coast Guard to verify if equipment complies with regulations. This alternative could potentially lead to a decrease in safety, if vessel owners and operators purchased non-ISO-compliant products that were not sufficiently safe or reliable for usage on board a survival craft. The potential for the additional burden on the Coast Guard to research and ascertain the compliance status of a piece of survival craft equipment could lead to much more significant costs than the current additional cost of \$397,433 from marking equipment.

#### *Alternative 4: Require Manufacturers to Cover the Cost of a COA*

The Coast Guard received a public comment suggesting that the manufacturers should cover the cost of COAs. We interpreted this comment as suggesting that manufacturers should reimburse the Coast Guard for the estimated \$2,672 in cost per new COA and the \$445 in cost per renewal COA. This alternative will introduce a transfer to cover the Coast Guard's cost of the approvals. Because this alternative will introduce a transfer, there will be no net cost saving from this action. Instead, manufacturing firms will experience an extra \$2,672 in costs each time they apply for a new COA and an extra \$445 in costs each time they try to renew a COA. By raising the costs of approval, the Coast Guard will be increasing entry barriers to manufacturing PFD devices.

Additionally, because our preferred alternative removes the requirements for a COA on nine types of equipment, this alternative will decrease cost savings by both the government cost savings of \$4,735 and the industry cost savings of \$336. Because this alternative will not decrease costs, and increases the entry barrier faced by manufacturing firms, we rejected this alternative.

#### *B. Small Entities*

Under the Regulatory Flexibility Act, 5 U.S.C. 601-612, we have considered whether this rule will have a significant economic impact on a substantial number of small entities. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard expects that this rule will not have a significant economic impact on small entities. We expect this rule to result in net cost savings to regulated entities.

We added two years of data to our data analysis in the NPRM; however, the random sample of our dataset is still valid. Using the same number of companies we

used in the proposed rule for the final rule, we estimate there to be 11,139 unique vessel operators and 16 equipment manufacturers affected by this rule. For this analysis, we presumed any company for which we were not able to find Small Business Administration (SBA) size data to be a small entity. An estimated 94 percent of the regulated entities (including the companies without SBA size data) are considered to be small by SBA industry size standards. Using MISLE data, the Coast Guard estimates there to be 11,155 unique companies affected in this rule, of which  $10,487 (0.94 \times 11,155)$  are small. We estimate that the average costs to equipment manufacturers will be reduced by \$1,418 per year, and the average costs to vessel owners and operators will be reduced by \$60 per year as a result of removing Coast Guard approval for the equipment subject to this rulemaking. We found that all small vessel operators and small equipment manufacturers impacted by this rule will have a cost savings less than 1 percent of their annual revenue. No small governmental jurisdictions will be impacted by this rule.

Therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

### *C. Assistance for Small Entities*

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104-121, we offer to assist small entities in understanding this rule so that they can better evaluate its effects on them and participate in the rulemaking. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on



actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

*D. Collection of Information*

This rule calls for a revision to an approved collection of information under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501–3520. As defined in 5 CFR 1320.3(c), “collection of information” comprises reporting, recordkeeping, monitoring, posting, labeling, and other similar actions. The title and description of the information collections, a description of those who must collect the information, and an estimate of the total annual burden follow. The estimate covers the time for reviewing instructions, searching existing sources of data, gathering and maintaining the data needed, and completing and reviewing the collection.

*Title:* Title 46 CFR Subchapter Q: Lifesaving, Electrical, Engineering and Navigation Equipment, Construction and Materials & Marine Sanitation Devices (33 CFR 159).

*OMB Control Number:* 1625-0035.

*Summary of the Collection of Information:* The Coast Guard currently collects information from lifesaving equipment manufacturers under 46 CFR chapter I, subchapter Q. The current ICR, 201811-1625-005 (OMB Control Number 1625-0035), accounts for the following collections of information: New Approval Applications, Renewal Approval Applications, Manufacturer Recordkeeping, Servicing Facility Recordkeeping, Servicing Facility Problem Reports, Instruction Materials, Markings, Production Tests and Laboratory Inspections, and Independent Laboratory Applications and Recognized Laboratory Applications.

*Need for Information:* The Coast Guard needs this information to ensure that the manufactured safety equipment meets minimum levels of performance safety and helps prevent death, injuries, and property damage associated with commercial maritime operations.

*Proposed Use of Information:* The Coast Guard uses the technical plans, drawings, specifications, instruction materials, and markings to determine compliance with the technical regulatory requirements for each piece of equipment. Independent laboratory reports ensure that product and material testing complies with the applicable Coast Guard regulations. Production testing reports ensure that the production stock of the equipment is identical to the stock that was originally tested and approved by the Coast Guard. Independent and recognized laboratory applications ensure that the laboratories have the technical capabilities to conduct the required testing and are independent for the organizations whose products they will test.

*Description of the Respondents:* The respondents are manufacturers of the safety equipment subject to Coast Guard approval, accepted and recognized independent laboratories that conduct testing of the equipment, and liferaft servicing facilities.

*Number of Respondents:* The Coast Guard estimates there will be 856 respondents, comprised of 480 equipment manufacturers, 233 liferaft servicing facilities, 139 accepted independent laboratories, and 4 recognized independent laboratories. This rule will impact 16 of these respondents. We do not expect this rule to reduce the total number of respondents, because equipment manufacturers may still manufacture other Coast Guard-approved lifesaving equipment that is not subject to this rule.

*Frequency of Response:* The number of responses per year will vary by requirement. New application materials, instructions, and markings are required with the initial COA application, and renewal application materials and markings are required 5 years after the initial application. Production test records and laboratory inspection records are required to be kept annually. The Coast Guard estimates this rule will reduce the number of responses for the following collections of information, presented in table 37, along with the current estimated time to complete each collection.

<p><b>Table 37: Time Burden Estimate by Application Type</b></p>
--

New Application	2 hours
Renewal Applications	0.5 hours
Manufacturer Records	0.17 hours
Packing Instruction Materials	0.1 hours
Markings for New Products	0.1 hours
Marking for Revisions	0.1 hours
Testing Records	2 hours
Laboratory Inspection Records	24 hours

In table 38, we estimate the reduction in the number of annual responses based on application type.

<b>Table 38: Number of Responses Reduced Annually by Application Type</b>			
<b>Response Type</b>	<b>Previous Iteration of ICR Appendix B</b>	<b>Change in Burden</b>	<b>Updated ICR Appendix B</b>
New Application	82	1	81
Renewal Applications	544	6	538
Manufacturer Records	2,715	27	2,688
Packing Instruction Materials	272,200	800	271,400
Markings for New Products	13,575	5	13,570
Marking for Revisions	108,600	40	108,560
Testing Records	1,828	6	1,820
Laboratory Inspection Records	1,828	6	1,820

*Burden of Response:* This rule will not modify the burden of response for any other existing collections of information.

*Estimate of Total Annual Burden:* The current ICR estimates the total annual burden to be 114,586 hours. As a result of this rule, we estimate the annual burden will be 86,430 hours, for an annual reduction of 28,156 hours. Together, these changes account for a total annual reduction in burden of 27,903 hours. These changes are summarized in table 39.

<b>Table 39: Summary of the Change in Burden</b>	
Baseline Total Burden	114,586
Program Changes	-27,903
Adjustment Changes	-253
Total Changes	-28,156
Proposed Total Burden	86,430

This rule is making an adjustment to the current OMB ICR. As required by 44

U.S.C. 3507(d), we will submit a copy of this rule to OMB for its review of the collection of information. You are not required to respond to a collection of information unless it displays a currently valid OMB control number.

*E. Federalism*

A rule has implications for federalism under Executive Order 13132 (Federalism) if it has a substantial direct effect on States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under Executive Order 13132 and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis follows.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. It is also well settled that all of the categories regulated under 46 U.S.C. 2103, 3103, 3306, 3703, 4102, 4502, 7101, and 8101 (design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels), as well as any other category in which Congress intended the Coast Guard to be the sole source of a vessel's obligations, are within the field foreclosed from regulation by the States. *See, e.g., United States v. Locke*, 529 U.S. 89 (2000) (finding that the States are foreclosed from regulating tanker vessels), *see also Ray v. Atlantic Richfield Co.*, 435 U.S. 151, 157 (1978) (State regulation is preempted where "the scheme of federal regulation may be so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it [or where] the Act of Congress may touch a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject." (Citations omitted)) Because this rule involves the design, maintenance, and equipping of vessels; specifically regarding certain survival craft equipment required to be carried in survival craft and rescue boats on certain, specified U.S.-flagged vessels, it relates to vessel

standards that are subject to a pervasive scheme of Federal regulation and is therefore foreclosed from regulation by the States. Therefore, because the States may not regulate within these categories, this rule is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

*F. Unfunded Mandates*

The Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531-1538, requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Although this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

*G. Taking of Private Property*

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630 (Governmental Actions and Interference with Constitutionally Protected Property Rights).

*H. Civil Justice Reform*

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988 (Civil Justice Reform) to minimize litigation, eliminate ambiguity, and reduce burden.

*I. Protection of Children*

We have analyzed this rule under Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). This rule is not an economically significant rule and will not create an environmental risk to health or risk to safety that might disproportionately affect children.

*J. Indian Tribal Governments*

This rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

*K. Energy Effects*

We have analyzed this rule under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

*L. Technical Standards and Incorporation by Reference*

The National Technology Transfer and Advancement Act, codified as a note to 15 U.S.C. 272, directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards will be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This rule uses the following voluntary consensus standards: ASTM F1003-02, ASTM F1014-02, ISO 18813:2006, ISO 25862:2009, and ISO 17339:2018. The sections that reference these standards and the locations where these standards are available are listed in 46 CFR 160.046-3 and 199.05.

This rule uses technical standards developed by voluntary consensus standards bodies to meet the stringent equipment requirements for survival craft and rescue boats

on board U.S.-flagged vessels. These standards provide internationally accepted and recognized parameters that equipment must meet in order to ensure its safety, proper usage, and preservation on the seas. The standards being incorporated were developed by either the ASTM or the ISO, which are voluntary consensus standard-setting organizations. The sections that reference these standards and the locations where these standards are available are listed in 46 CFR parts 160 and 199.

Two ASTM standards will be updated and incorporated by reference in this rulemaking: (1) ASTM F1003-02 (Reapproved 2007), “Standard Specification for Searchlights on Motor Lifeboats” (2007); and (2) ASTM F1014-02 (Reapproved 2007), “Standard Specification for Flashlights on Vessels” (2002).

These ASTM standards specify requirements for construction of searchlights and flashlights (respectively), including materials, dimensions, performance, and capability. The newer versions of these standards are not materially different from the previous versions. We are not updating the third ASTM standard already incorporated in § 199.05, ASTM 93-97, “Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester.”

The following three ISO standards are incorporated by reference in this rulemaking:

*1. ISO 18813:2006, Ships and marine technology – Survival equipment for survival craft and rescue boats.*

This standard specifies design, performance, and use of various items of survival equipment carried in survival craft and rescue boats complying with SOLAS and the LSA Code. It also includes guidelines for maintenance and periodic inspections by Administrations or ships’ crews for many items.

*2. ISO 25862:2009, Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices.*

This standard gives requirements regarding construction and performance of marine magnetic compasses for navigation and steering purposes, binnacles, and azimuth reading devices.

*3. ISO 17339:2018, Ships and marine technology – Life saving and fire protection – Sea anchors for survival craft and rescue boats.*

This standard specifies requirements for the design, performance, and prototype testing of sea anchors fitted to survival craft (liferafts and lifeboats) and rescue boats in accordance with the LSA Code.

With this rulemaking, we also updated our incorporation by reference of International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), 2016 edition, and the Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, (IGC Code), adopted May 22, 2014, to reflect the updated editions. No changes to the specific referenced material have been made between the older editions and the more recent editions. The IBC Code provides an international standard for the safe transport by sea of dangerous and noxious liquid chemicals in bulk. The purpose of the IGC Code is to provide an international standard for the safe transport by sea in bulk of liquefied gases and certain other substances.

The Director of the **Federal Register** has approved the material in §§ 160.046-3 and 199.05 for incorporation by reference under 5 U.S.C. 552 and 1 CFR part 51. Copies of the material are available from the sources listed in §§ 160.046-3 and 199.05.

Consistent with 1 CFR part 51 incorporation by reference provisions, this material is reasonably available. Interested persons have access to it through their normal course of business, may purchase it from the organization identified in 46 CFR 160.046-3 or 199.05, or may view a copy by means we have identified in those sections.



We have analyzed this rule under Department of Homeland Security Management Directive 023-01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370f), and have made a determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. A Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble. This rule is categorically excluded under paragraphs L52, L57, and L58 of Appendix A, Table 1 of DHS Instruction Manual 023-01-001-01, Rev. 1. Paragraph L52 pertains to regulations concerning vessel and operation safety standards. Paragraph L57 pertains to regulations concerning manning, documentation, admeasurements, inspection, and equipping of vessels. Paragraph L58 pertains to regulations concerning equipment approval and carriage requirements.

This rule removes the Coast Guard type approval requirement for some survival craft equipment, and replaces it with the requirement that the manufacturer self-certify that their equipment complies with a consensus standard.

### **List of Subjects**

#### *46 CFR Part 121*

Communications equipment, Marine safety, Navigation (water), Passenger vessels.

#### *46 CFR Part 160*

Incorporation by reference, Marine safety, Reporting and recordkeeping requirements.

#### *46 CFR Part 169*

Fire prevention, Incorporation by reference, Marine safety, Reporting and

recordkeeping requirements, Schools, Vessels.

*46 CFR Part 184*

Communications equipment, Marine safety, Navigation (water), Passenger vessels, Reporting and recordkeeping requirements.

*46 CFR Part 199*

Cargo vessels, Incorporation by reference, Marine safety, Oil and gas exploration, Passenger vessels, Reporting and recordkeeping requirements.

For the reasons discussed in the preamble, the Coast Guard amends 46 CFR parts 121, 160, 169, 184, and 199 as follows:

**PART 121 - VESSEL CONTROL AND MISCELLANEOUS SYSTEMS AND EQUIPMENT**

1. The authority citation for part 121 is revised to read as follows:

**Authority:** 46 U.S.C. 2103, 3306; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; DHS Delegation 00170.1, Revision No. 01.2.

2. Revise § 121.710 to read as follows:

**§ 121.710 First-aid kits.**

A vessel must carry either a first-aid kit that meets the requirements in 46 CFR 199.175(b)(10) or a kit with equivalent contents and instructions. For equivalent kits, the contents must be stowed in a suitable, watertight container that is marked “First-Aid Kit”.

A first-aid kit must be easily visible and readily available to the crew.

**PART 160—LIFESAVING EQUIPMENT**

3. The authority citation for part 160 is revised to read as follows:

**Authority:** 46 U.S.C. 2103, 3103, 3306, 3703, 4102, 4302, and 4502; and DHS Delegation 00170.1, Revision No. 01.2, paragraph (II)(92)(b).

4. Amend § 160.010-3 by revising paragraphs (a)(12)(ii) and (e)(7)(ii) to read as follows:

**§ 160.010-3 Inflatable buoyant apparatus.**

(a) \* \* \*

(12) \* \* \*

(ii) *Knives*. One knife, of a type designed to minimize the chance of damage to the inflatable buoyant apparatus and secured with a lanyard ready for use near the painter attachment. Any knife may be replaced with a jackknife meeting the requirements in 46 CFR 199.175(b)(16). In addition, an inflatable buoyant apparatus that is permitted to accommodate 13 persons or more must be provided with a second knife that is of the non-folding type;

\* \* \* \* \*

(e) \* \* \*

(7) \* \* \*

(ii) *First-aid kit*. A first-aid kit as described in 46 CFR 199.175(b)(10);

\* \* \* \* \*

#### **Subpart 160.013 [Removed and Reserved]**

5. Remove and reserve subpart 160.013, consisting of §§ 160.013-1 through 160.013-5.

#### **Subpart 160.026 [Removed and Reserved]**

6. Remove and reserve subpart 160.026, consisting of §§ 160.026-1 through 160.026-7.

#### **Subpart 160.041 [Removed and Reserved]**

7. Remove and reserve subpart 160.041, consisting of §§ 160.041-1 through 160.041-6.

#### **Subpart 160.043 [Removed and Reserved]**

8. Remove and reserve subpart 160.043, consisting of §§ 160.043-1 through 106.043-6.

#### **Subpart 160.044 [Removed and Reserved]**

9. Remove and reserve subpart 160.044, consisting of §§ 160.044-1 through 160.044-5.

10. Add subpart 160.046, consisting of §§ 160.046-1 through 160.046-11, to read as follows:

**Subpart 160.046—Emergency Provisions**

Sec.

160.046-1 Scope.

160.046-3 Incorporation by reference.

160.046-5 General requirements for emergency provisions.

160.046-7 Independent laboratory.

160.046-9 Manufacturer certification and labeling.

160.046-11 Manufacturer notification.

**§ 160.046-1 Scope.**

This subpart applies to emergency provisions approved to be carried in lifeboats and liferafts, in accordance with 46 CFR 199.175(b)(22).

**§ 160.046-3 Incorporation by reference.**

(a) Certain material is incorporated by reference into this subpart with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at the Coast Guard Headquarters. Contact the Coast Guard at: Commandant (CG-ENG-4), U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE, Washington, DC 20593-7509; email: [typeapproval@uscg.mil](mailto:typeapproval@uscg.mil); website: [www.dco.uscg.mil/CG-ENG-4/](http://www.dco.uscg.mil/CG-ENG-4/). It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov); website: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html). All approved material is available from the source(s) listed in this section.

(b) International Organization for Standardization (ISO), Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland; phone: +41 22 749 01 11; email: [central@iso.org](mailto:central@iso.org); web: [www.iso.org](http://www.iso.org).

(1) ISO 18813:2006(E), Ships and marine technology - Survival equipment for survival craft and rescue boats, First edition, April 1, 2006; IBR approved for §§ 160.046-5; 160.046-7; 160.046-11.

(2) [Reserved]

**§ 160.046-5 General requirements for emergency provisions.**

Emergency provisions must meet the requirements found in ISO 18813:2006(E) paragraph 4.31 (incorporated by reference, see § 160.046-3).

**§ 160.046-7 Independent laboratory.**

Unless the Commandant directs otherwise, an independent laboratory accepted by the Coast Guard under 46 CFR part 159, subpart 159.010, must perform or witness, as appropriate, inspections, tests, and oversight required by ISO 18813:2006(E) paragraph 4.31 (incorporated by reference, see § 160.046-3). Approval and production tests of emergency provisions must be carried out in accordance with the procedures for independent laboratory inspections in 46 CFR part 159, subpart 159.007, and in this section unless the Commandant authorizes alternative tests and inspections. The Commandant may prescribe additional production tests and inspections necessary to maintain quality control and to monitor compliance with the requirements of this subpart.

**§ 160.046-9 Manufacturer certification and labeling.**

(a) Each provision must be certified by the manufacturer as complying with the requirements of this subpart.

(b) The container should be clearly and permanently marked with:

(1) The name and address of the approval holder;

(2) The U.S. Coast Guard Approval number;

(3) The total food energy value of provisions in the container in calories and kiloJoules;

(4) The lot number;

- (5) The month and year the provision was packed; and
- (6) The month and year of expiration (5 years after the date of packing).
- (c) The emergency provision must include waterproof instructions for use, assuming consumption of 3350 kiloJoules per person per day.

**§ 160.046-11 Manufacturer notification.**

(a) Each manufacturer of emergency provisions approved in accordance with the specifications of this subpart must send a test report required by ISO 18813:2006(E) paragraph 4.31.2 (incorporated by reference, see § 160.046-3) to the Commandant (CG-ENG-4), U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE, Washington, DC 20593-7509 or email *typeapproval@uscg.mil*:

- (1) With the application for approval;
- (2) Every year as long as the manufacturer continues to produce provisions; and
- (3) Each time the contents of the emergency provisions change.

(b) [Reserved]

11. Amend § 160.051-11 by revising paragraph (b) to read as follows:

**§ 160.051-11 Equipment required for Coastal Service inflatable liferafts.**

\* \* \* \* \*

(b) *Knife*. One knife, of a type designed to minimize the chance of damage to the inflatable liferaft and secured with a lanyard. In addition, an inflatable liferaft that is permitted to accommodate 13 persons or more must be provided with a second knife that is of the non-folding type. Any knife may be replaced with a jackknife meeting the requirements in 46 CFR 199.175(b)(16).

\* \* \* \* \*

**Subpart 160.054 [Removed and Reserved]**

12. Remove and reserve subpart 160.054, consisting of §§ 160.054-1 through 106.054-7.

**Subpart 160.061 [Removed and Reserved]**

13. Remove and reserve subpart 160.061, consisting of §§ 160.061-1 through 106.061-5.

14. Amend § 160.135-7 by revising paragraph (b)(23) to read as follows:

**§ 160.135-7 Design, construction, and performance of lifeboats.**

\* \* \* \* \*

(b) \* \* \*

(23) *Bilge pump.* Each lifeboat that is not automatically self-bailing must be fitted with a manual bilge pump that meets the requirements in 46 CFR 199.175(b)(2). Each such lifeboat with a capacity of 100 persons or more must carry an additional manual bilge pump or an engine-powered bilge pump.

\* \* \* \* \*

15. Amend § 160.151-21 by revising paragraphs (b), (h), (o), and (q) through (s) as follows:

**§ 160.151-21 Equipment required for SOLAS A and SOLAS B inflatable liferafts.**

\* \* \* \* \*

(b) *Jackknife (IMO LSA Code, as amended by Resolution MSC.293(87), Chapter IV/4.1.5.1.2).* Each folding knife must be a jackknife meeting the requirements in 46 CFR 199.175(b)(16).

\* \* \* \* \*

(h) *First-aid kit (IMO LSA Code, as amended by Resolution MSC.293(87), Chapter IV/4.1.5.1.8).* Each first-aid kit must meet the requirements in 46 CFR 199.175(b)(10).

\* \* \* \* \*

(o) *Signalling mirror (IMO LSA Code, as amended by Resolution MSC.293(87), Chapter IV/4.1.5.1.15).* Each signalling mirror must meet the requirements in 46 CFR

199.175(b)(19).

\* \* \* \* \*

(q) *Fishing tackle (IMO LSA Code, as amended by Resolution MSC.293(87), Chapter IV/4.1.5.1.17).* The fishing tackle must meet the requirements in 46 CFR 199.175(b)(11).

(r) *Food rations (IMO LSA Code, as amended by Resolution MSC.293(87), Chapter IV/4.1.5.1.18).* The food rations must meet the requirements in 46 CFR 199.175(b)(22).

(s) *Drinking water (IMO LSA Code, as amended by Resolution MSC.293(87), Chapter IV/4.1.5.1.19).* Emergency drinking water must meet the requirements in 46 CFR 199.175(b)(40). The desalting apparatus or reverse osmosis desalinators must be approved by the Commandant under approval series 160.058.

\* \* \* \* \*

16. Amend § 160.156-7 by revising paragraph (b)(22) to read as follows:

**§ 160.156-7 Design, construction and performance of rescue boats and fast rescue boats.**

\* \* \* \* \*

(b) \* \* \*

(22) *Manual bilge pump.* Each rescue boat that is not automatically self-bailing must be fitted with a manual bilge pump that meets the requirements in 46 CFR 199.175(b)(2), or an engine-powered bilge pump.

\* \* \* \* \*

## **PART 169—SAILING SCHOOL VESSELS**

17. The authority citation for part 169 is revised to read as follows:

**Authority:** 33 U.S.C. 1321(j); 46 U.S.C. 3306, 6101; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp., p. 793; DHS Delegation 00170.1, Revision No. 01.2; §



169.117 also issued under the authority of 44 U.S.C. 3507.

18. Amend § 169.115 by revising paragraphs (a) and (e) to read as follows:

**§ 169.115 Incorporation by reference.**

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at the Coast Guard Headquarters and at the National Archives and Records Administration (NARA). Contact the Coast Guard at: Commandant (CG-ENG-4), U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593-7509; email: [typeapproval@uscg.mil](mailto:typeapproval@uscg.mil); website: [www.dco.uscg.mil/CG-ENG-4/](http://www.dco.uscg.mil/CG-ENG-4/). For information on the availability of this material at NARA, email: [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov); website: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html). The material may be obtained from the source(s) in the following paragraph(s) of this section.

\* \* \* \* \*

(e) The Textile Color Card Association of the United States, Inc. 200 Madison Avenue, New York. (For availability of this material, contact the Coast Guard – see paragraph (a) of this section.)

(1) Cable No. 70072, Standard Color Card of America, Ninth edition, 1941 for § 169.529(b).

(2) [Reserved]

\* \* \* \* \*

19. Revise § 169.527 to read as follows:

**§ 169.527 Required equipment for lifeboats.**

(a) All lifeboats must be equipped in accordance with table 1 to 46 CFR 199.175 except as provided in paragraphs (b) and (c) of this section.

(b) The following equipment must be carried in addition to the equipment

required under 46 CFR 199.175:

- (1) Cover;
- (2) Ditty bag; and
- (3) Mast and sail.

(c) If operating on protected waters, lifeboat equipment need only to consist of the following:

- (1) Boathook — (1);
- (2) Bucket — (1);
- (3) Fire extinguisher — (2) U.S. Coast Guard-approved Type B:C (motor propelled lifeboats only);
- (4) Hatch — (1);
- (5) Lifeline — (1);
- (6) Oar unit — (1);
- (7) Painter — (1);
- (8) Plug — (1);
- (9) Oarlock unit — (1); and
- (10) Toolkit (motor propelled lifeboats only).

20. Revise § 169.529 to read as follows:

**§ 169.529 Description of lifeboat equipment.**

(a) All lifeboat equipment must meet the requirements under 46 CFR 199.175, except as provided in paragraph (b) of this section.

(b) The following equipment, carried in addition to the equipment required under 46 CFR 199.175, must meet the following requirements:

(1) *Cover, protecting.* The cover must be of highly visible color and capable of protecting the occupants against exposure. A cover is not required for fully enclosed lifeboats.

(2) *Ditty bag*. The ditty bag must consist of a canvas bag or equivalent and must contain a sailmaker's palm, needles, sail twine, marline, and marlin spike, except that motor-propelled lifeboats need not carry a ditty bag.

(3) *Mast and sail*. A unit, consisting of a standing lug sail together with the necessary spars and rigging, must be provided in accordance with table 1 to this section, except that motor-propelled lifeboats need not carry a mast or sails. The sails must be of good quality canvas, or other material acceptable to the Commandant, colored Indian Orange (Cable No. 70072, Standard Color Card of America; incorporated by reference, see § 169.115). Rigging must consist of galvanized wire rope not less than  $\frac{3}{16}$ -inch in diameter. The mast and sail must be protected by a suitable cover.

**Table 1 to § 169.529**

Length of lifeboat, feet		Standing lug sail										Commercial designation number	Mast <sup>1</sup>			Yard <sup>1</sup>		
Over—	Not over—	Area, square feet	Luff and head lengths		Leach length		Foot length		Clew to throat		Ounces per square yard		Length		Diameter, inches	Length		Diameter, inches
			Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches			Feet	Inches		Feet	Inches	
	17	58	5	11	12	1	8	10	10	10	14.35	10	11	2	3	6	11	2
17	19	74	6	8	13	8	10	0	12	2	14.35	10	12	6	3	7	8	2
19	21	93	7	5	15	1	11	2	13	8	14.35	10	13	10	3½	8	5	2½
21	23	113	8	3	16	11	12	4	15	1	14.35	10	15	2	3½	9	3	2½
23	25	135	9	0	18	6	13	6	16	6	14.35	10	16	6	4	10	0	3
25	27	158	9	9	20	0	14	7	17	10	17.50	8	17	10	4	10	9	3
27	29	181	10	5	21	5	15	7	19	1	17.50	8	19	2	4½	11	5	3¼
29	31	203	11	0	22	8	16	6	20	3	20.74	6	20	6	4½	12	0	3¼
31 <sup>2</sup>																		

<sup>1</sup> Mast lengths measured from heel to center of upper halyard sheave. Mast diameters measured at thwart. Mast and yard shall be of clear-grained spruce, fir, or equivalent.

<sup>2</sup> Subject to special consideration.

## **PART 184 - VESSEL CONTROL AND MISCELLANEOUS SYSTEMS AND EQUIPMENT**

21. The authority citation for part 184 is revised to read as follows:

**Authority:** 46 U.S.C. 2103, 3306; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; DHS Delegation 00170.1, Revision No. 01.2.

22. Revise § 184.710 to read as follows:

### **§ 184.710 First-aid kits.**

A vessel must carry either a first-aid kit that meets the requirements in 46 CFR 199.175(b)(10) or a kit with equivalent contents and instructions. For equivalent kits, the contents must be stowed in a suitable, watertight container that is marked “First-Aid Kit”.

A first-aid kit must be easily visible and readily available to the crew.

## **PART 199—LIFESAVING SYSTEMS FOR CERTAIN INSPECTED VESSELS**

23. The authority citation for part 199 is revised to read as follows:

**Authority:** 46 U.S.C. 2103, 3103, 3306, and 3703; and DHS Delegation 00170.1, Revision No. 01.2, paragraph (II)(92)(b).

24. Revise § 199.05 to read as follows:

### **§ 199.05 Incorporation by reference.**

Certain material is incorporated by reference in this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at the Coast Guard Headquarters and at the National Archives and Records Administration (NARA).

Contact the Coast Guard at: Commandant (CG-ENG-4), U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE, Washington, DC 20593-7509, email

*typeapproval@uscg.mil* or visit <https://www.dco.uscg.mil/CG-ENG-4/>. It is also

available for inspection at the National Archives and Records Administration (NARA).

For information on the availability of this material at NARA, email:

fr.inspection@nara.gov or go to [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html). The material may be obtained from the following source(s):

(a) *ASTM International (ASTM)*. 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959; phone: (610) 832 9500; email [service@astm.org](mailto:service@astm.org); web: [www.astm.org](http://www.astm.org).

(1) ASTM D 93-97, Standard Test Methods for Flash-Point by Pensky-Martens Closed Cup Tester, approved July 10, 1997; IBR approved for §§ 199.261; 199.290.

(2) ASTM F1003-02 (Reapproved 2007), Standard Specification for Searchlights on Motor Lifeboats, approved May 1, 2007; IBR approved for § 199.175.

(3) ASTM F1014-02 (Reapproved 2007), Standard Specification for Flashlights on Vessels, approved May 1, 2007; IBR approved for § 199.175.

(b) *International Maritime Organization (IMO)*. Publications Section, 4 Albert Embankment, London, SE1 7SR, United Kingdom; phone: +44 (0)20 7735 7611; email: [info@imo.org](mailto:info@imo.org); web: [www.imo.org](http://www.imo.org).

(1) IBC Code, International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, 2016 edition, copyright 2016, Chapter 2 Ship survival capability and location of cargo tanks; IBR approved for § 199.280.

(2) IBC Code, International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, 2016 edition, copyright 2016, Chapter 17 Summary of minimum requirements; IBR approved for § 199.30.

(3) MSC Circular 699, Revised Guidelines for Passenger Safety Instructions, issued July 17, 1995, IBR approved for § 199.217.

(4) Resolution A.520(13), Code of Practice for the Evaluation, Testing and Acceptance of Prototype Novel Life-saving Appliances and Arrangements, adopted November 17, 1983; IBR approved for § 199.40.

(5) Resolution A.657(16), Instructions for Action in Survival Craft, adopted October 19, 1989; IBR approved for § 199.175.

(6) Resolution A.658(16), Use and Fitting of Retro-reflective Materials on Life-saving Appliances, adopted October 19, 1989; IBR approved for §§ 199.70; 199.176.

(7) Resolution A.760(18), Symbols Related to Life-saving Appliances and Arrangements, adopted November 4, 1993, IBR approved for §§ 199.70; 199.90.

(8) Resolution MSC.370(93), Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, (IGC Code), adopted May 22, 2014; IBR approved for §§ 199.30; 199.280.

(c) *International Standard Organization (ISO)*. Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland; phone: +41 22 749 01 11; email: [central@iso.org](mailto:central@iso.org); web: [www.iso.org](http://www.iso.org).

(1) ISO 17339:2018(E), Ships and marine technology – Life saving and fire protection—Sea anchors for survival craft and rescue boats, Second edition, July 2018; IBR approved for § 199.175.

(2) ISO 18813:2006(E), Ships and marine technology - Survival equipment for survival craft and rescue boats, First edition, April 1, 2006; IBR approved for § 199.175.

(3) ISO 25862:2009(E), Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices, First edition, May 15, 2009; IBR approved for § 199.175.

### **§ 199.30 [Amended]**

25. Amend § 199.30 in the definition for “Toxic vapor or gas” as follows:

a. Remove the text “IBC Code” and add, in its place, the text “IBC Code; incorporated by reference, see § 199.05”; and

b. Remove the text “IGC Code” and add, in its place, the text “IGC Code; incorporated by reference, see § 199.05”.

26. Amend § 199.175 as follows:

- a. In paragraph (a)(4), remove the word “and”;
- b. Redesignate paragraph (a)(5) as paragraph (a)(6);
- c. Add new paragraph (a)(5);
- d. In the introductory text to paragraph (b), remove the text “table 199.175 of this section” and add, in its place, the text “table 1 to this section”;
- e. Revise the introductory text to paragraph (b)(2), paragraphs (b)(5), (6), (9) through (13), (16), (17), and (19), and (b)(27)(i);
- f. In paragraph (b)(28)(i), remove the text “F 1003” and add, in its place, the text “F1003”;
- g. Revise paragraph (b)(40) introductory text;
- h. Redesignate paragraphs (b)(40)(i) and (ii) as paragraphs (b)(40)(iii) and (iv);
- i. Add new paragraphs (b)(40)(i) and (ii);
- j. In newly-redesignated paragraph (b)(40)(iv), remove the words “reverse osmosis” and add, in their place, the text “reverse-osmosis”;
- k. Add paragraph (c) immediately before table 199.175;
- l. Designate table 199.175 as table 1 to § 199.175;
- m. In newly-designated table 1 to § 199.175, revise entries 5 and 17; and
- n. Add footnote 11 to the footnotes following table 1 to § 199.175.

The revisions and additions read as follows:

**§ 199.175 Survival craft and rescue boat equipment.**

(a) \* \* \*

(5) Must be marked with either the Coast Guard approval number or the standard that the product meets, as applicable; and

\* \* \* \* \*

(b) \* \* \*



(2) *Bilge pump*. The bilge pump must meet the requirements in ISO 18813:2006(E) paragraph 4.3 (incorporated by reference, see § 199.05) and must be installed in a ready-to-use condition.

\* \* \* \* \*

(5) *Can opener*. A can opener must meet the requirements in ISO 18813:2006(E) paragraph 4.43 (incorporated by reference, see § 199.05). A can opener may be in a jackknife meeting the requirements in paragraph (b)(16) of this section.

(6) *Compass*. The compass and its mounting arrangement must meet the requirements in ISO 18813:2006(E) paragraph 4.6 (incorporated by reference, see § 199.05).

(i) In a totally enclosed lifeboat, the compass must be permanently fitted at the steering position; in any other boat it must be provided with a binnacle, if necessary, to protect it from the weather, and with suitable mounting arrangements.

(ii) The compass must be tested in accordance with the provisions in ISO 25862:2009(E) Annex H (incorporated by reference, see § 199.05) by an independent laboratory accepted by the Coast Guard in accordance with part 159, subpart 159.010, of this chapter.

\* \* \* \* \*

(9) *Fire extinguisher*. The fire extinguisher must be approved under approval series 162.028. The fire extinguisher must have a rating of a 40-B:C. Two 10-B:C extinguishers may be carried in place of a 40-B:C extinguisher. Extinguishers with larger numerical ratings or multiple letter designations may be used instead.

(10) *First-aid kit*. Each first-aid kit must meet the requirements in ISO 18813:2006(E) paragraph 4.12 (incorporated by reference, see § 199.05).

(i) A first-aid kit may be considered acceptable if it meets all of the requirements of ISO 18813:2006(E) paragraph 4.12, except that it does not contain the burn

preparations. It must be clearly marked on the first-aid kit that it does not include the burn preparations.

(ii) The active ingredients in medicinal products must conform to over-the-counter (OTC) drug regulations set out in 21 CFR part 330.

(11) *Fishing kit*. The fishing kit must meet the requirements in ISO 18813:2006(E) paragraph 4.13 (incorporated by reference, see § 199.05).

(12) *Flashlight*. The flashlight must be a type I or type III that is constructed and marked in accordance with ASTM F1014 (incorporated by reference, see § 199.05). One spare set of batteries and one spare bulb, stored in a watertight container, must be provided for each flashlight.

(13) *Hatchet*. The hatchet must be suitable for cutting a rope towline or painter in an emergency and must not require assembly or unfolding.

(i) The hatchet must be at least 14 inches in length and have a cutting edge of approximately 3–1/4 inches in length, with a hardened steel or equivalent alloy head.

(ii) The hatchet must be provided a lanyard at least 3 feet in length.

(iii) The hatchet must be stowed in brackets near the release mechanism and, if more than one hatchet is carried, the hatchets must be stowed at opposite ends of the boat.

\* \* \* \* \*

(16) *Jackknife*. The jackknife must consist of a one-bladed knife fitted with a can opener and attached to the boat by its lanyard. The jackknife must meet the requirements in ISO 18813:2006(E) paragraph 4.19 (incorporated by reference, see § 199.05).

(17) *Knife*. The knife must be of the non-folding type with a buoyant handle as follows:

(i) The knife for a rigid liferaft must be secured to the raft by a lanyard and stowed in a pocket on the exterior of the canopy near the point where the painter is attached to the liferaft. If an approved jackknife is substituted for the second knife

required on a liferaft equipped for 13 or more persons, the jackknife must also be secured to the liferaft by a lanyard.

(ii) The knife in an inflatable or rigid-inflatable rescue boat must be of a type designed to minimize the possibility of damage to the fabric portions of the hull.

(iii) Any knife may be replaced with a jackknife meeting the requirements in paragraph (b)(16) of this section.

\* \* \* \* \*

(19) *Mirror*. The signalling mirror must meet the requirements in ISO 18813:2006(E) paragraph 4.23 (incorporated by reference, see § 199.05).

\* \* \* \* \*

(27) \* \* \*

(i) The sea anchor for a lifeboat, rescue boat, and rigid liferaft must meet the requirements in ISO 17339:2018(E) (incorporated by reference, see § 199.05).

\* \* \* \* \*

(40) *Water*. The water must meet the requirements in ISO 18813:2006(E) paragraph 4.46 (incorporated by reference, see § 199.05).

(i) The water must meet the U.S. Public Health Service “Drinking Water Standards” in 40 CFR part 141 to suitably protect the container against corrosion. After treatment and packing, the water must be free from organic matter, sediment, and odor. It must have a pH between 7.0 and 9.0 as determined by means of a standard pH meter using glass electrodes. Water quality must be verified by the local municipality or independent laboratory accepted by the Coast Guard in accordance with part 159, subpart 159.010, of this chapter.

(ii) Containers of emergency drinking water must be tested in accordance with the provisions in ISO 18813:2006(E) by an independent laboratory accepted by the Coast Guard in accordance with part 159, subpart 159.010, of this chapter.

\* \* \* \* \*

(c) Any Coast Guard-approved equipment on board before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] may remain on board as long as it remains in good and serviceable condition.

**Table 1 to § 199.175—Survival Craft Equipment**

Item No.	Item	International voyage			Short international voyage		
		Lifeboat	Rigid liferaft (SOLAS A pack)	Rescue boat	Lifeboat	Rigid liferaft (SOLAS B pack)	Rescue boat
* * * * *							
5	Can opener <sup>11</sup>	3	3		3		
* * * * *							
17	Knife <sup>1 4 11</sup>	1	1	1	1	1	1
* * * * *							

Notes:

<sup>1</sup> Each liferaft equipped for 13 persons or more must carry two of these items.

\* \* \* \* \*

<sup>4</sup> A hatchet counts towards this requirement in rigid rescue boats.

\* \* \* \* \*

<sup>11</sup> One (1) jackknife may replace one (1) can opener and one (1) knife.

**§ 199.280 [Amended]**

27. Amend § 199.280 in paragraphs (e)(2) and (3) by removing the words “in Bulk” and adding, in their place, the text “in Bulk (incorporated by reference, see § 199.05)”.

Dated: October 26, 2022.

**W. R. Arguin,**

*Rear Admiral, U. S. Coast Guard,*

*Assistant Commandant for Prevention Policy.*

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